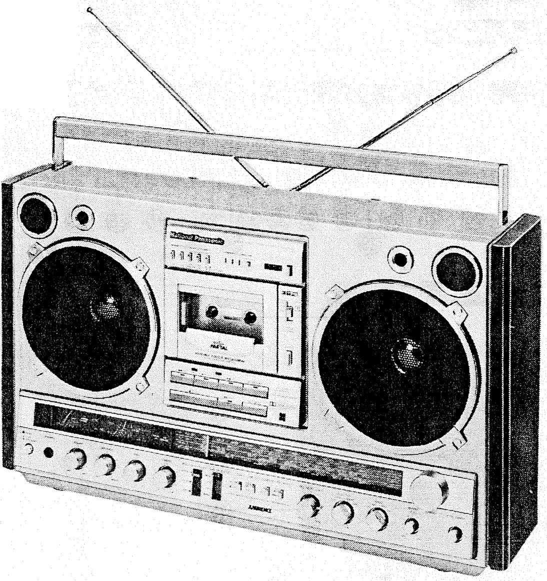
ORDER NO. RD81051873C3

Service Manual

Radio Cassette

RX-7000F

FM-MW-SW1-SW2 4-Band Radio Stereo Cassette Recorder



■ SPECIFICATIONS

General:

Power Source:	AC 100∼110/115∼127/200∼220/230∼250V 50/60Hz or 15V (Ten "D" size Flashlight Batteries) (National UM-1 or equivalent) Car/boat battery: with Optional Car/boat adaptor, RP-9550
Power Consumption:	29W (AC only)
Power Output:	PMPO 32 W (16 W×2) RMS Max 22W (11W × 2)
Speakers:	Woofer: 16cm ($6\,{}^{5}/_{16}$″) PM Dynamic speaker 3Ω Tweeter: 5cm (2″) PM Dynamic speaker 4Ω
Input:	MIC: sensitivity 0.13mV (microphone impedance 200∼600Ω) MIXING MIC: sensitivity 0.5mV (microphone impedance 200∼1000Ω) LINE IN: sensitivity 100mV (impedance 47kΩ over) PHONO: sensitivity 2.5mV (impedance 47kΩ over) PHONO EARTH EXT ANT: FM, 300Ω balanced type/AM
Output:	LINE OUT: standard output 420mV (impedance 4.7kΩ under) EXT SP: impedance 3∼8Ω HEADPHONES: impedance 8Ω
Dimensions:	560(W) × 333(H) × 176(D) mm (22 × $13\,{}^{1}/_{8}$ × $6\,{}^{15}/_{16}$)″
Weight:	8kg (17 lb 10 oz) without battery
Radio Section:	
Frequency Range:	FM: 88∼108MHz MW: 525∼1605kHz (571∼187m) SW1: 2.3∼7MHz (130∼42.9m) SW2: 7∼22MHz (42.9∼13.6m)
Intermediate Frequency:	FM: 10.7MHz AM (MW, SW1, SW2): 455kHz
Sensitivity:	FM: 2μV for 50mW output MW: 70μV/m for 50mW output SW1: 25μV/m for 50mW output SW2: 7μV for 50mW output
Tape Deck Section:	
Frequency Response:	30∼12,000Hz (Normal) 30∼14,000Hz (FeCr) 30∼14,000Hz (CrO_2) 30∼17,000Hz (Metal)
Wow and Flutter:	0.06% (WRMS)
Motor:	Electrical governor motor
Recording System:	AC bias (68kHz)
Erasing System:	AC erase
Track System:	4-track 2-channel stereo recording and playback
Mixing System:	Mixing playback and recording
Tape Speed:	4.8cm/sec ($1\,{}^{7}/_{8}$ ips)
Program Time:	1 hour with C-60 cassette tape

Specifications are subject to change without notice.

National Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka, Japan

LOCATION OF CONTROLS AND COMPONENTS

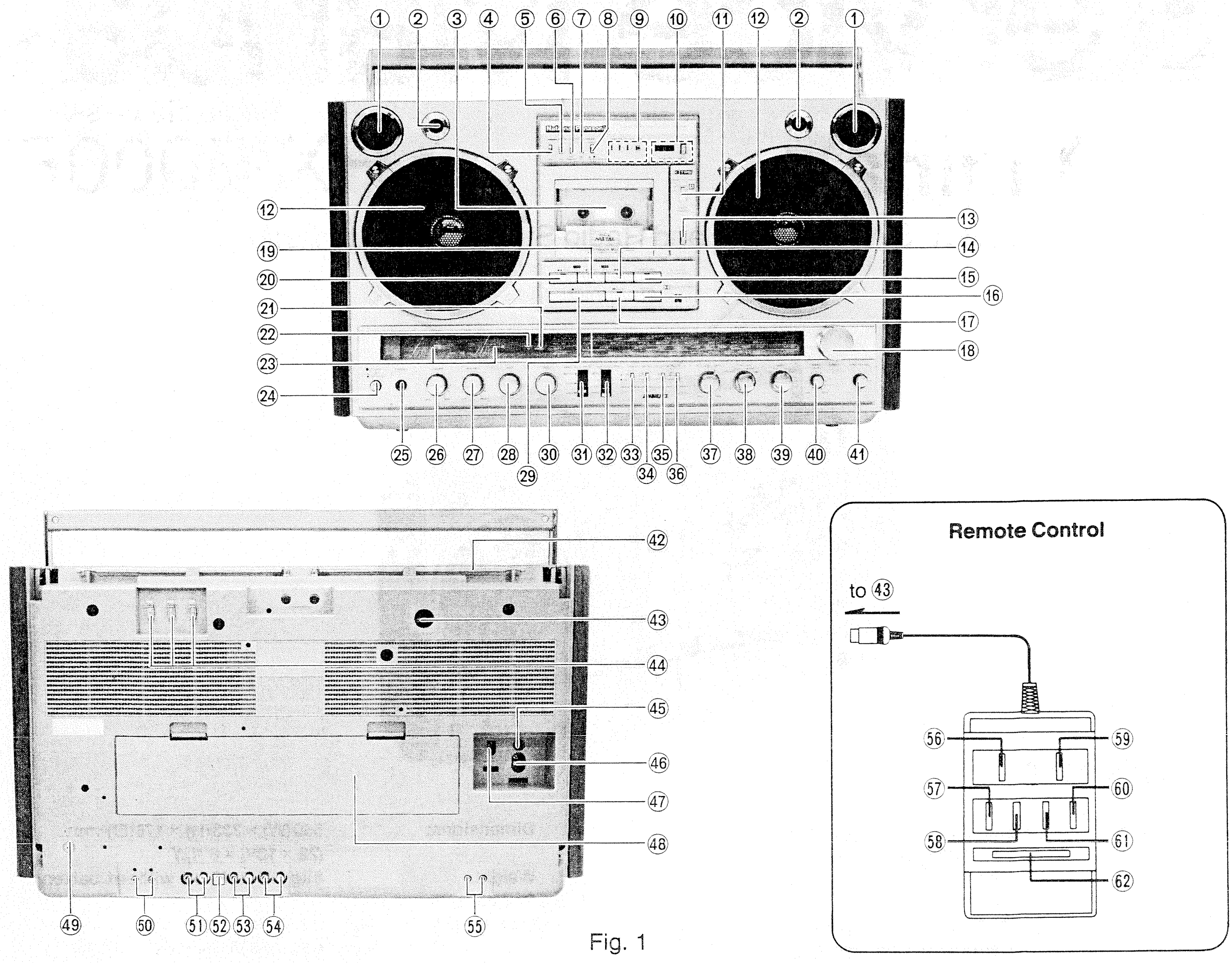


Fig. 1

① Speakers (Tweeter), 5cm (2″), 4Ω
② Built-in Microphones (MIC)
③ Cassette Compartment
④ Auto Operation "OFF" Button (OFF)
⑤ Tape Program Sensor (TPS) Button (TPS)
⑥ One Program Button (ONE PROGRAM)
⑦ One Side Button (ONE SIDE)
⑧ Repeat Button (REPEAT)
⑨ TPS Selector and Indicator [TPS (PROGRAM/1, 2, 3)]
⑩ Tape Counter and Reset Button (COUNTER/RESET)
⑪ Timer Standby Selector (TIMER STANDBY)
⑫ Speakers (Woofer), 16cm (6$^{5}/_{16}$″), 3Ω
⑬ Eject Button (EJECT)
⑭ Fast Forward Button and Indicator (▶▶FF)
⑮ Record Button and Indicator (o RECORD)
⑯ Record Muting Button (REC MUTE)
⑰ Pause Button and Indicator (❚❚ PAUSE)
⑱ Radio Tuning control (TUNING)
⑲ Play Button and Indicator (▶PLAY)
⑳ Rewind Button and Indicator (◀◀REW)
㉑ FM Stereo Indicator (FM STEREO)
㉒ Dolby Noise Reduction Indicator (DOLBY NR)
㉓ Meter (Battery/Tuning/Level)
㉔ Power Button and Indicator (POWER)
㉕ Headphone Jack (PHONES), 8Ω
㉖ Volume Control (VOLUME)
㉗ Balance Control (BALANCE)
㉘ Bass Control (BASS)
㉙ Stop Button (■ STOP)
㉚ Treble Control (TREBLE)
㉛ Mode Selector/Beat Proof Switch (AMBIENCE **I** /STEREO **II** /MONO **I**)
㉜ Tape Selector (NORMAL/FeCr/CrO_2/METAL)
㉝ Light Button (LIGHT)
㉞ Meter Selector (TUNE, BATT/LEVEL)
㉟ Dolby Noise Reduction Switch (IN/OUT)
㊱ Recording Mode Selector (EASYMATIC/MANUAL)
㊲ Recording Level Control (REC LEVEL L—◉—R)
㊳ Function Selector (TAPE/RADIO/PHONO/LINE)
㊴ Band Selector (FM/MW/SW1/SW2)
㊵ Mixing Level Control (MIXING LEVEL)
㊶ Fine Tuning Control (FINE TUNING)
㊷ Telescopic Antenna
㊸ Remote Control Jack (REMOTE)
㊹ External Antenna Terminals
AM ANT FM ANT
㊺ DC Input Jack [DC IN 13.2V (12~15) ⊖—◉—⊕]
㊻ AC Socket (AC IN ~)
㊼ Voltage Selector (VOLTAGE SELECTOR)
㊽ Battery Compartment
㊾ Mixing Microphone Jack (MIXING MIC), 0.5mV, 200~1000Ω
㊿ Microphone Jacks (MIC), 0.13mV, 200~600Ω
(51) Phono Magnetic Cartridge Input Jacks (PHONO), 2.5mV, 47kΩ over
(52) Phono Earth Terminal (EARTH)
(53) Line Input Jacks (LINE IN), 100mV, 47kΩ over
(54) Line Output Jacks (LINE OUT), 420mV, 4.7kΩ under
(55) External Speaker Jacks (EXT SP 3~8Ω)

Remote Control

(56) Pause Button [PAUSE]
(57) Rewind Button [REW]
(58) Play Button [PLAY]
(59) Record Muting Button [REC MUTE]
(60) Record Button [REC]
(61) Fast Forward Button [FF]
(62) Stop Button [STOP]

DISASSEMBLY INSTRUCTIONS

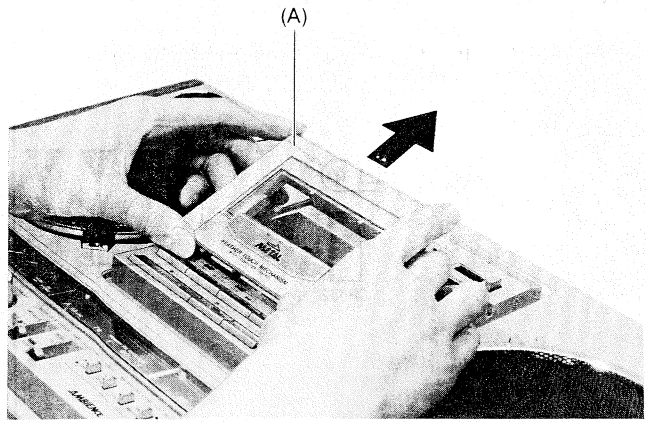


Fig. 2

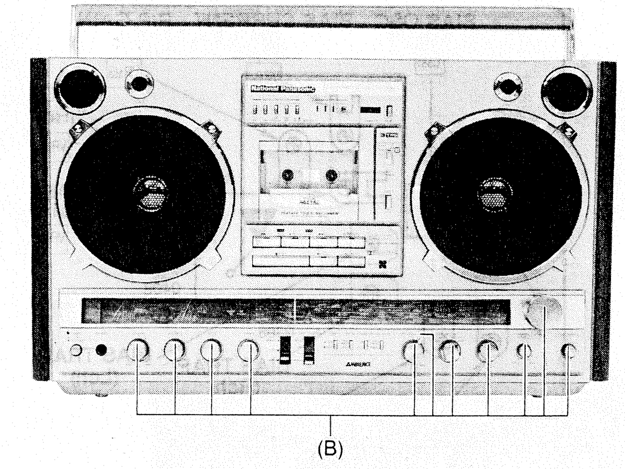


Fig. 3

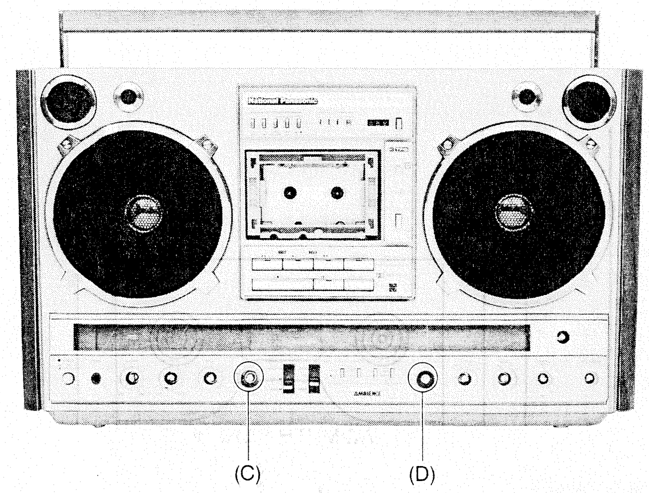


Fig. 4

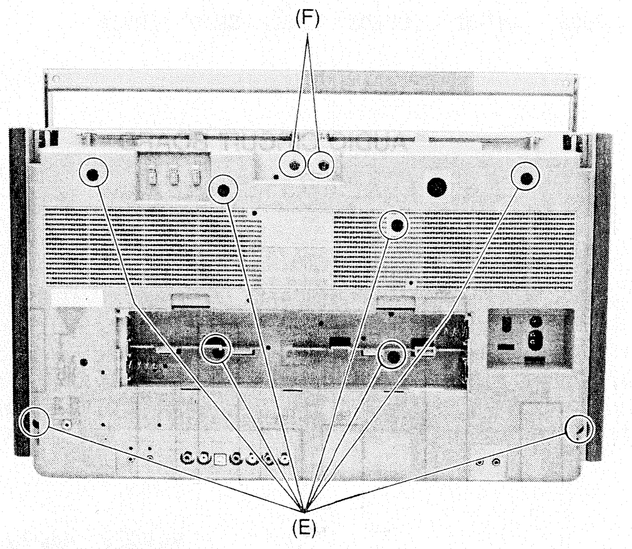


Fig. 5

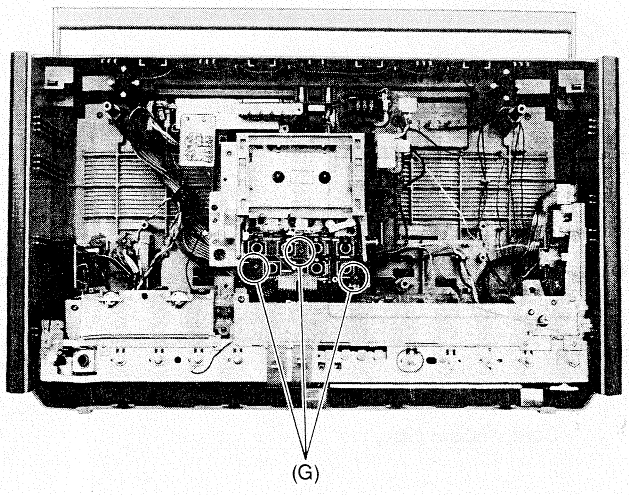


Fig. 6

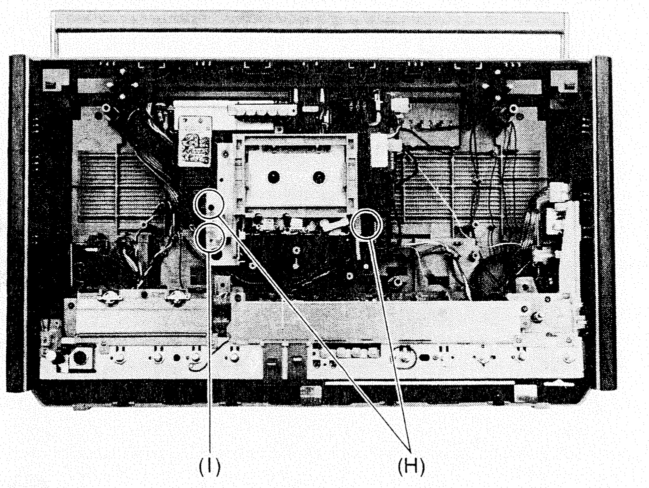


Fig. 7

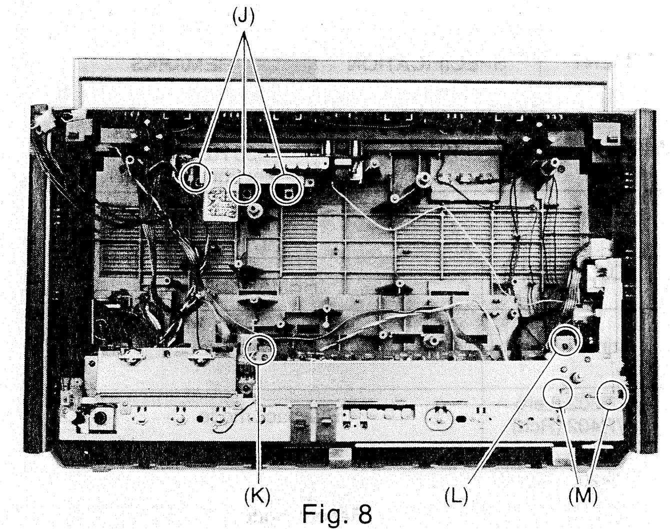


Fig. 8

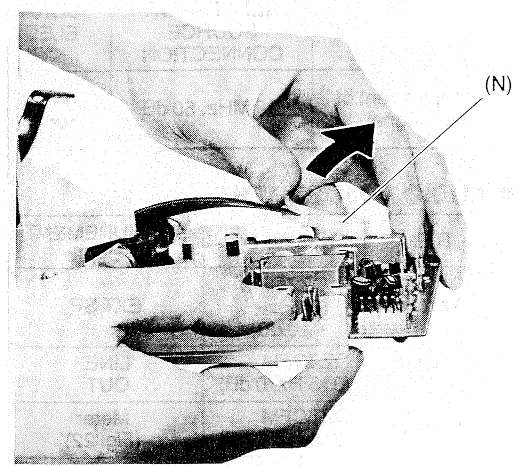


Fig. 9

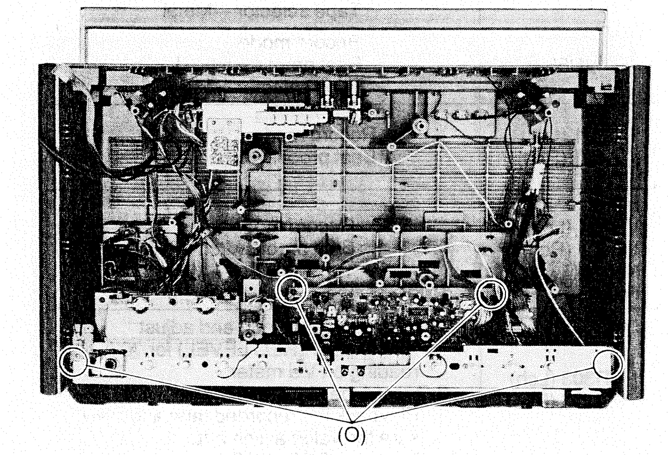


Fig. 10

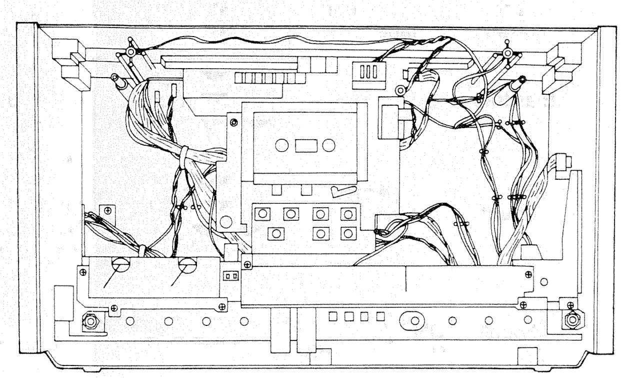


Fig. 11

Procedure	To remove	Remove	Shown in Fig.
1	Front Cabinet	Remove the cassette panel in the direction of arrow. . . . . (A) × 1	2
2		Knobs . . . . (B) × 11	3
3		Nut (8ø) . . . . (C) × 1	4
4		Nut (9ø) . . . . (D) × 1	4
5		Screws (3.5 × 50) . . . . (E) × 8	5
6	Telescopic Antenna	Screws (3 × 16). . . . . (F) × 2	5
7	Switch Circuit Board	Red Screws (3 × 12). . . . . (G) × 3	6
8	Mechanism	Red Screws (3 × 12). . . . . (H) × 2	7
9		Screw (3 × 8). . . . . (I) × 1	7
10	Control Circuit Board	Red Screws (3 × 12) . . . . (J) × 3	8
11	Dial chassis	Screw (3 × 12). . . . . (K) × 1	8
12		Red Screws (3 × 12) . . . . (L) × 1	8
13		Screws (3 × 8) . . . . (M) × 2	8
14		Pull out the wire in the direction of arrow. . . . . . . (N) × 1	9
15	Chassis	Red Screws (3 × 12). . . . . (O) × 4	10

Notes
1. Arange the leadwires as shown in fig. 11.
2. After replace the head, arange the leadwires as shown in fig. 12.

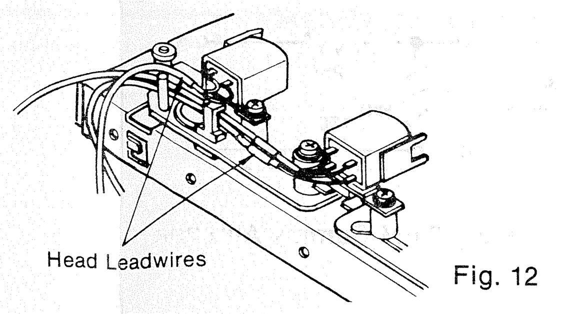
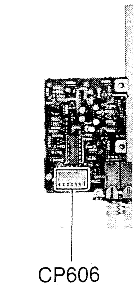
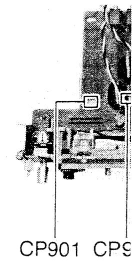


Fig. 12





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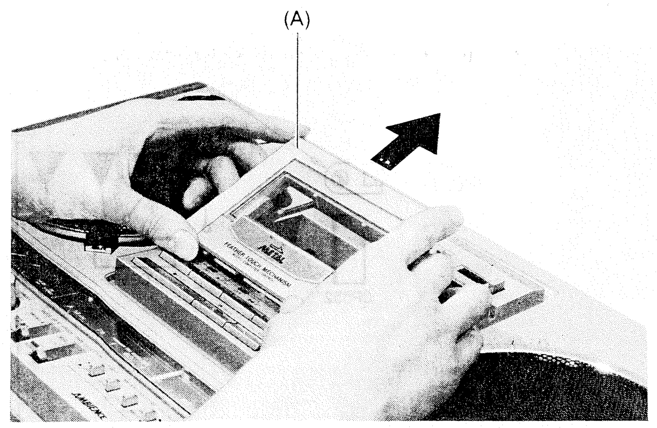
DISASSEMBLY INSTRUCTIONS



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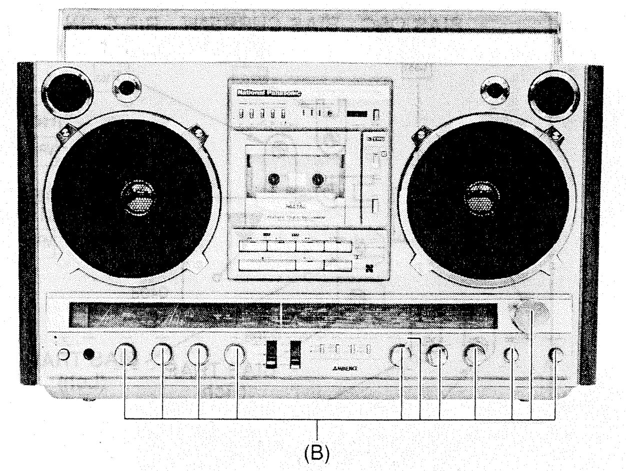
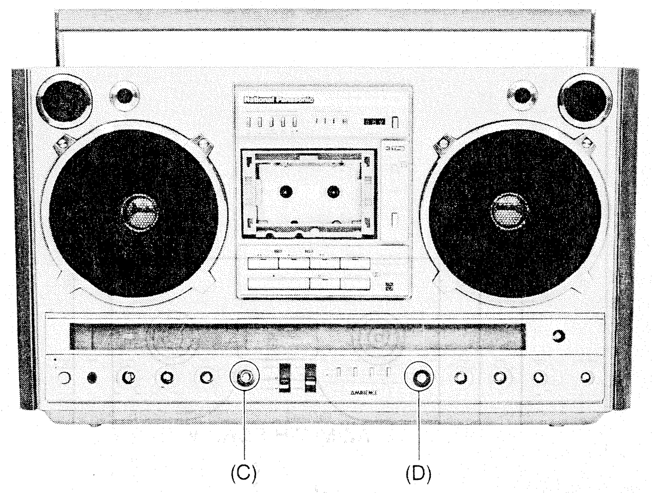


Fig. 3



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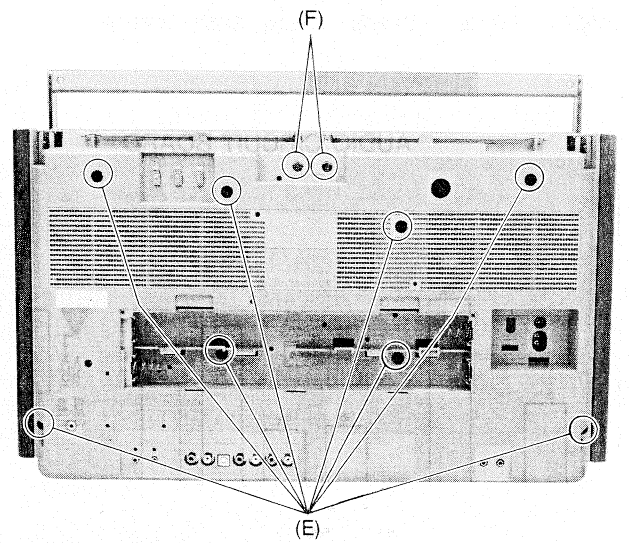

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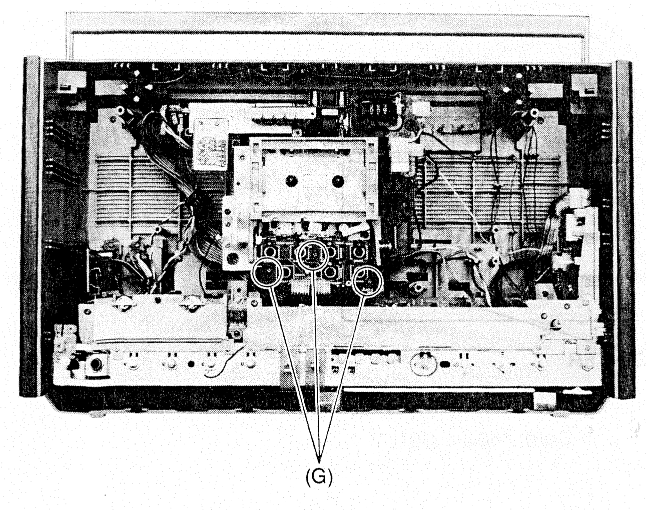

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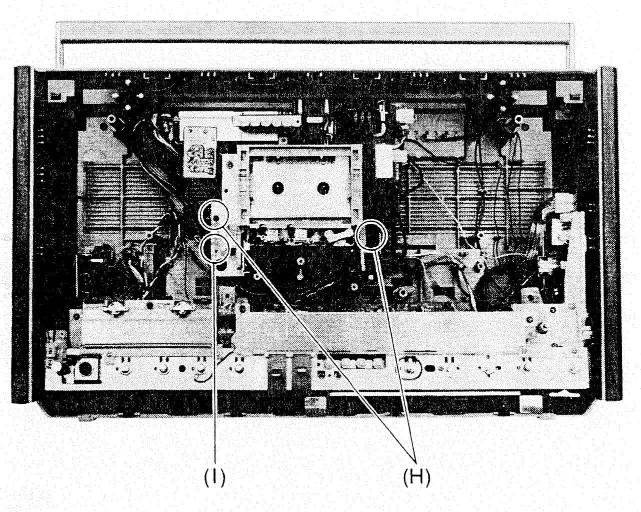

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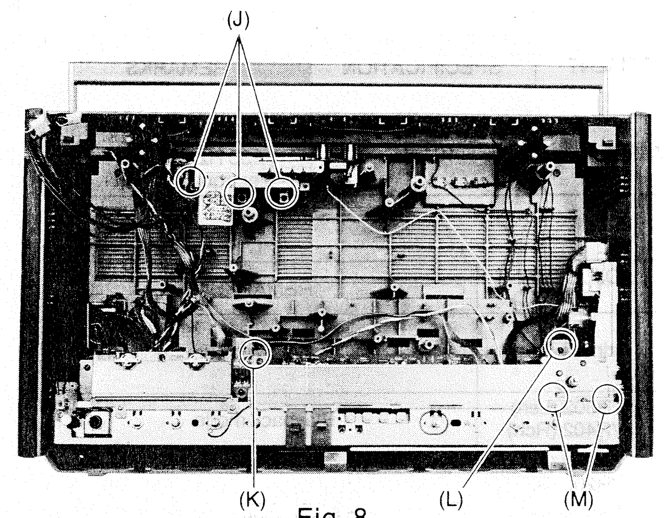


Fig. 8

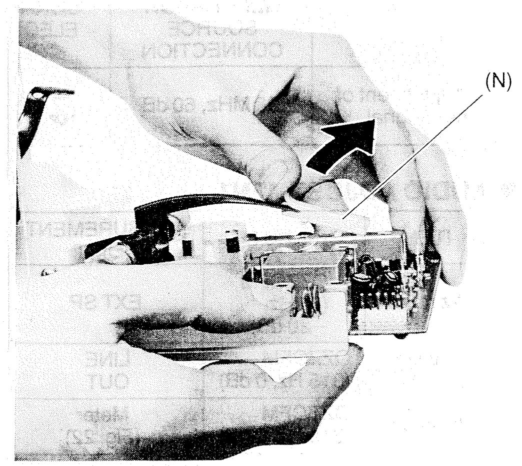


Fig. 9

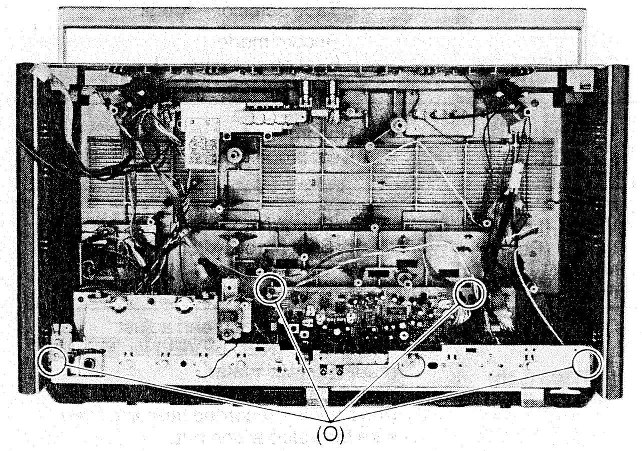
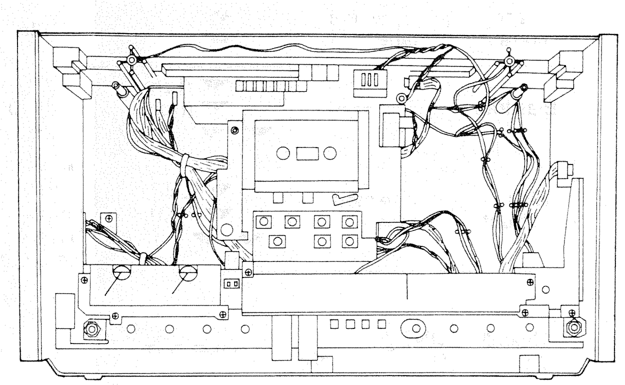


Fig. 10



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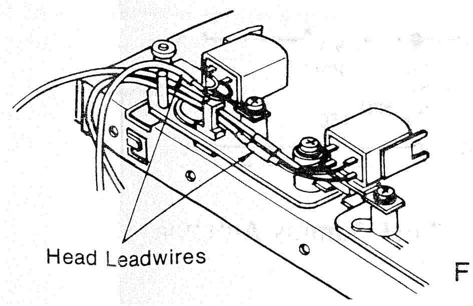
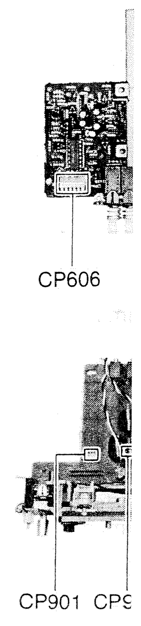


Fig. 12



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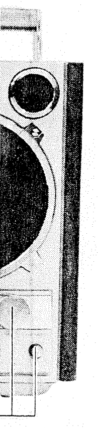
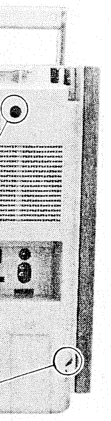
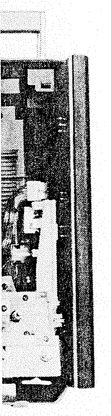






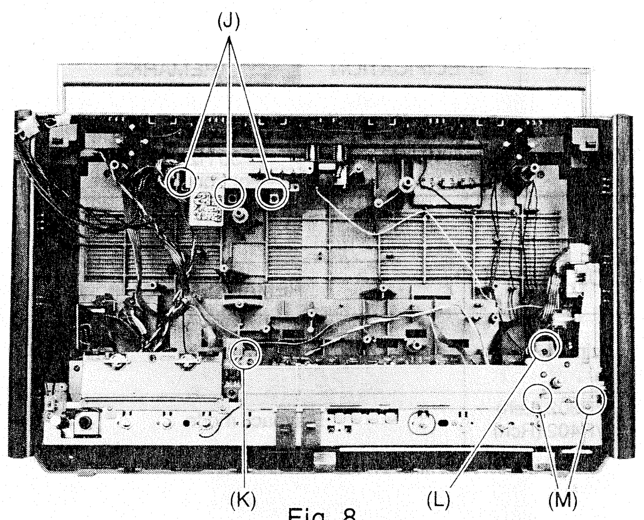


Fig. 8

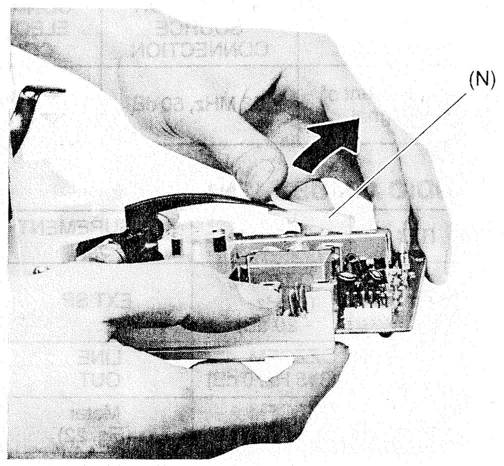


Fig. 9

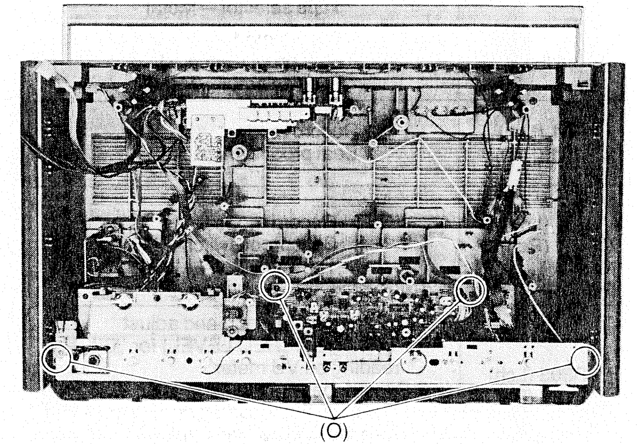
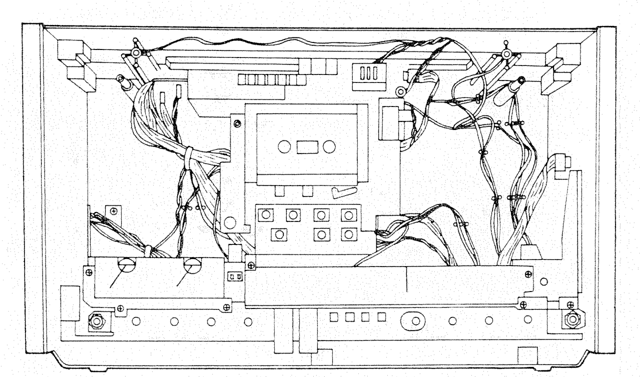


Fig. 10



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5		Screws (3.5 × 50) . . . .(E) × 8	5
6	Telescopic Antenna	Screws (3 × 16). . . . .(F) × 2	5
7	Switch Circuit Board	Red Screws (3 × 12). . . . .(G) × 3	6
8	Mechanism	Red Screws (3 × 12). . . . .(H) × 2	7
9		Screw (3 × 8). . . . .(I) × 1	7
10	Control Circuit Board	Red Screws (3 × 12) . . . .(J) × 3	8
11	Dial chassis	Screw (3 × 12). . . . .(K) × 1	8
12		Red Screws (3 × 12) . . . .(L) × 1	8
13		Screws (3 × 8) . . . .(M) × 2	8
14		Pull out the wire in the direction of arrow. . . . .(N) × 1	9
15	Chassis	Red Screws (3 × 12). . . . .(O) × 4	10

Notes
1. Arange the leadwires as shown in fig. 11.
2. After replace the head, arange the leadwires as shown in fig. 12.

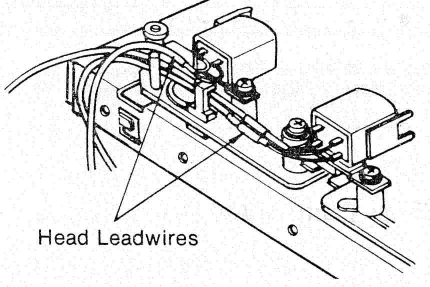
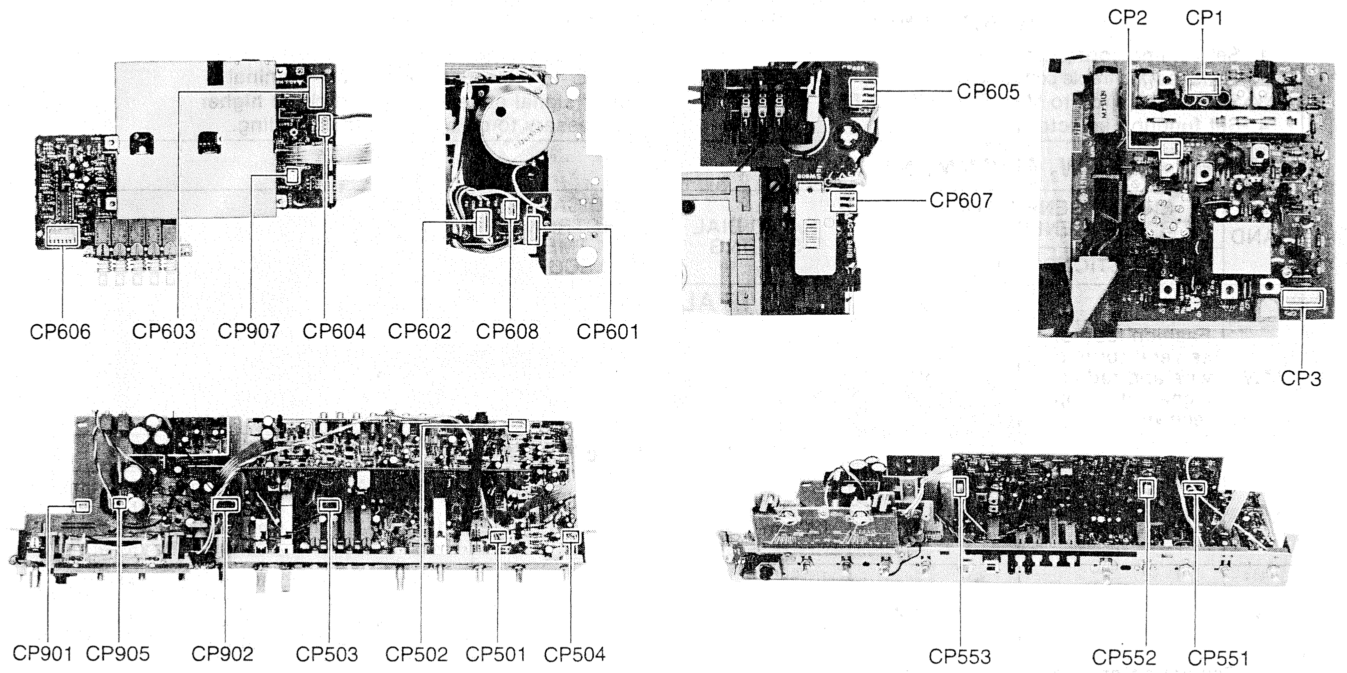

Head Leadwires

Fig. 12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CP907
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CP602
CP608
CP601
CP901
CP905
CP902
CP503
CP502
CP501
CP504
CP553
CP552
CP551

Fig. 13

CP1:	Antenna Connector	CP602:	Leaf Switch Connector
CP2:	Fine Tuning Connector	CP603:	Switch Circuit Board Connector
CP3:	Radio Connector	CP604:	Switch Circuit Board Connector
CP501:	LED Connector	CP605:	IC Connector
CP502:	Built-in Microphone Connector	CP606:	LED Connector
CP503:	Meter Connector	CP607:	Timer Circuit Board Connector
CP504:	Mixing Microphone Connector	CP608:	Control Circuit Board Connector
CP551:	R/P Head Connector	CP901:	Speaker Connector
CP552:	Control Circuit Board Connector	CP902:	Audio Connector
CP553:	Erase Head Connector	CP905:	Power Source Connector
CP601:	Motor, Plunger Connector	CP907:	Control Circuit Board Connector

DIAL THREADING

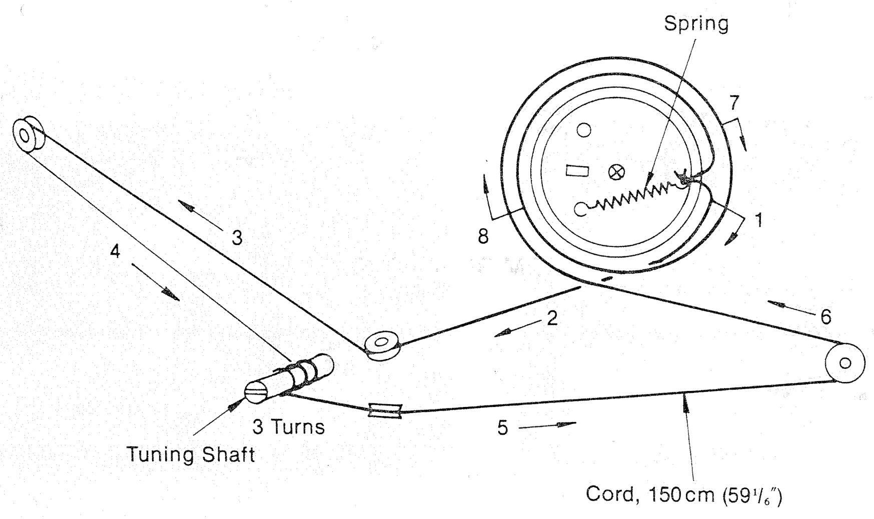

Spring
7
1
8
3
4
2
6
5
3 Turns
Tuning Shaft
Cord, 150cm (59 1/6")

Fig. 14

ALIGNMENTS

■ ALIGNMENTS INSTRUCTION

READ CAREFULLY BERORE ATTEMPTING ALIGNMENT

1. Set volume control to maximum.
2. Set bass and treble control to center.
3. Set band switch to MW, SW₁, SW₂ or FM.
4. Set function selector to radio.
5. Set fine tuning to center.
6. Supply DC 15 V through the battery terminals.
7. Output of signal generator should be no higher than necessary to obtain an output reading.

■ MW, SW₁, AND SW₂ ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
				AM IF ALIGNMENT			
(1)	MW	Fashion loop of serveral turns of wire and radiate signal into loop of receiver.	455 kHz 30% Mod. at 400 Hz	Point of non-interference.	Output meter across voice coil.	T3 (AM 1st IFT)	Adjust for maximum output.
				MW-RF ALIGNMENT			
(2)	MW	〃	550 kHz	550 kHz [20mm (25/32")]	Output meter across voice coil.	L9 (MW OSC Coil) (*1) L3 (MW ANT Coil)	Adjust for maximum output. Adjust L3 by moving coil bobbin along ferrite core.
(3)	MW	〃	1500 kHz	1500 kHz [167.9mm (6⅝")]	〃	CT6 (MW OSC Trimmer) CT1 (MW ANT Trimmer)	Adjust for maximum output. Repeat steps (2) and (3).
	(*1) Cement antenna bobbin with wax after completing alignment.						
				SW₁-RF ALIGNMENT			
(4)	SW₁	〃	2.3 MHz	2.3 MHz [6.3 mm (¼")]	Output meter across voice coil.	L10 (SW₁ OSC Coil) (*2) L4 (SW₁ ANT Coil)	Adjust for maximum output. Adjust L4 by moving coil bobbin along ferrite core.
(5)	SW₁	〃	7 MHz	7 MHz [178.8mm (7 1/16")]	〃	CT7 (SW₁ OSC Trimmer) CT2 (SW₁ ANT Trimmer)	Adjust for maximum output. Repeat steps (4) and (5).
	(*2) Cement antenna bobbin with wax after completing alignment.						
				SW₂-RF ALIGNMENT			
(6)	SW₂	Connect to test point ▼13 through 10PF capacitor. Negative side to point ▼11	7 MHz	7 MHz [6.3 mm (¼")]	Output meter across voice coil.	L11 (SW₂ OSC Coil) L5 (SW₂ ANT Coil)	Adjust for maximum output.
(7)	SW₂	〃	22 MHz	22 MHz [178mm (7 1/16")]	〃	CT8 (SW₂ OSC Trimmer) CT3 (SW₂ ANT Trimmer)	Adjust for maximum output. Repeat steps (6) and (7).

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
				FM-IF ALIGNMENT			
(1)	FM	Connect to test point ▼12 through 0.001μF. Negative side to test point ▼11.	10.7 MHz	Point of non-interference.	Connect vert. amp of scope to test point ▼13. Negative side to test point ▼11.	T2 (FM 1st)	Adjust for maximum amplitude. (Refer to Fig. 15.)
(2)	FM		〃	〃	〃	T4 (FM 2nd)	Adjust for maximum amplitude. (Refer to Fig. 16.)
				FM-RF ALIGNMENT			
(3)	FM	Connect to test point ▼10 through FM dummy antenna. Negative side to test point ▼11. (Refer to Fig. 17.)	90 MHz	90 MHz [22.4mm (⅞")]	Output meter across voice coil.	L8 (FM OSC Coil) L7 (FM TUNE Coil)	(*3) Adjust for maximum output.
(4)	FM	〃	106 MHz	106 MHz [154mm (6 1/16")]	〃	CT5 (FM OSC Trimmer) CT4 (FM TUNE Trimmer)	(*3) Adjust for maximum output. Repeat steps (3) and (4).
	(*3) Three output responses will be present; proper tuning is the center frequency.						

■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	98 MHz, 60 dB	▼8 ... (+) side ▼9 ... (−) side	VR502	19 kHz	Adjust VR, for 19 kHz (±30 Hz) reading on electronics counter.

■ AUDIO ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8 kHz, −20 dB)	EXT SP	Maximum output	Azimuth screw	Playback mode
Playback level	QZZCFM (315 Hz, 0 dB)	LINE OUT	0.42±0.02 V	VR302 (Lch) VR402 (Rch)	Playback mode
VU meter	QZZCFM (315 Hz, 0 dB)	Meter (Fig. 22)	"0" point	VR102 (Lch) VR202 (Rch)	
Bias oscillation frequency	——	▼7 ... (+) ▼E ... (−)	67.5±0.5 kHz	L551	Record mode Beat proof switch→II Tape selector→Metal
Erase current	Use metal tape	▼7 ... (+) ▼E ... (−)	135±5 mV	VR552	Record mode Beat proof switch→I Tape selector→Metal
Bias trap	——	▼3 (Lch) ▼4 (Rch) ▼1, ▼2 ... (−)	7±0.2 mV	L301 (Lch) L401 (Rch)	Record mode Beat proof switch ... I→II
Bias current	Use metal tape	▼3 (Lch) ▼4 (Rch) ▼1, ▼2 ... (−)	Metal 7±0.2 mV CrO₂ 4.5±0.2 mV FeCr Normal 3.5±0.1 mV	Metal VR301 (Lch) VR401 (Rch) Normal } VR551 FeCr	Record mode Beat proof switch→II Tape selector→Metal
Overall gain	LINE IN (1 kHz, −14 dB)	LINE OUT	0.42±0.03 V	VR303 (Lch) VR403 (Rch)	1. Set recording mode and adjust VR101, 201 (REC LEVEL) for "0" reading on VU meter. 2. Record the signal (1 KHz/−14 dB). 3. Playback the recorded tape and make sure the value at line output becomes 0.42±0.03 V.

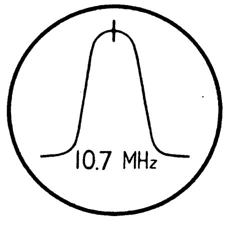


Fig. 15

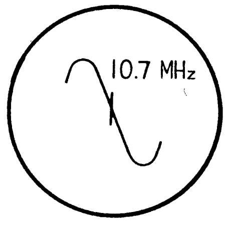


Fig. 16

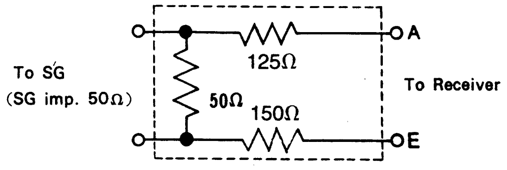


Fig. 17 FM Dummy Antenna

RADIO CIRCUIT BOARD

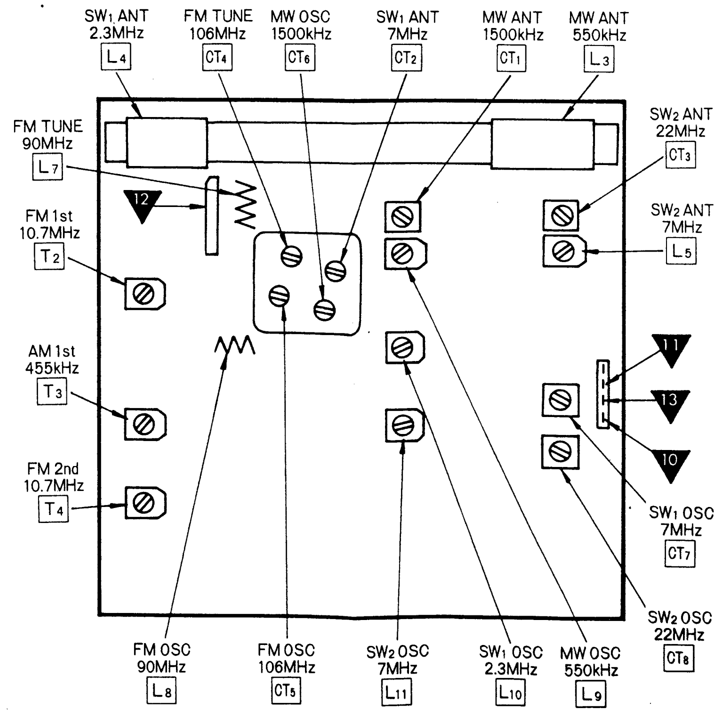
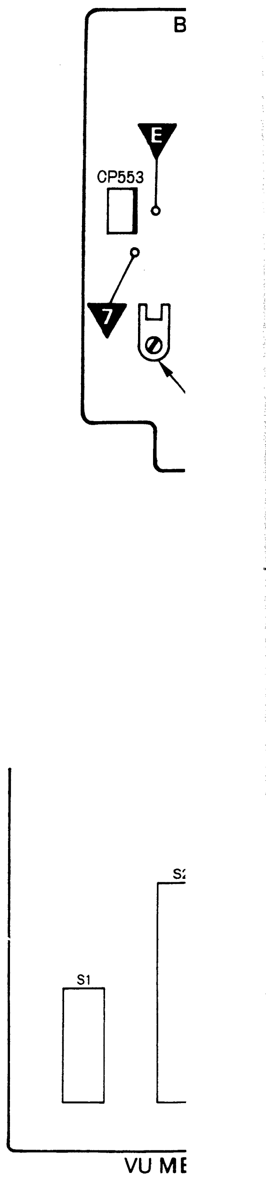


Fig. 18



■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	98 MHz, 60 dB	▼8 . . . (+) side ▼9 . . . (−) side	VR502	19 kHz	Adjust VR, for 19 kHz (±30 Hz) reading on electronics counter.

■ AUDIO ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8 kHz, −20 dB)	EXT SP	Maximum output	Azimuth screw	Playback mode
Playback level	QZZCFM (315 Hz, 0 dB)	LINE OUT	0.42±0.02 V	VR302 (Lch) VR402 (Rch)	Playback mode
VU meter	QZZCFM (315 Hz, 0 dB)	Meter (Fig. 22)	"0" point	VR102 (Lch) VR202 (Rch)	
Bias oscillation frequency	———	▼7 . . . (+) ▼E . . . (−)	67.5±0.5 kHz	L551	Record mode Beat proof switch→II Tape selector→Metal
Erase current	Use metal tape	▼7 . . . (+) ▼E . . . (−)	135±5 mV	VR552	Record mode Beat proof switch→I Tape selector→Metal
Bias trap	———	▼3 (Lch) ▼4 (Rch) ▼1 , ▼2 . . . (−)	7±0.2 mV	L301 (Lch) L401 (Rch)	Record mode Beat proof switch . . . I→II
Bias current	Use metal tape	▼3 (Lch) ▼4 (Rch) ▼1 , ▼2 . . . (−)	Metal 7±0.2 mV CrO₂ 4.5±0.2 mV FeCr Normal 3.5±0.1 mV	Metal VR301 (Lch) VR401 (Rch) Normal } VR551 FeCr	Record mode Beat proof switch→II Tape selector→Metal
Overall gain	LINE IN (1 kHz, −14 dB)	LINE OUT	0.42±0.03 V	VR303 (Lch) VR403 (Rch)	1. Set recording mode and adjust VR101, 201 (REC LEVEL) for "0" reading on VU meter. 2. Record the signal (1 KHz/−14 dB). 3. Playback the recorded tape and make sure the value at line output becomes 0.42±0.03 V.

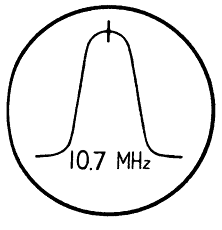


Fig. 15

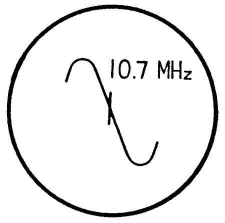
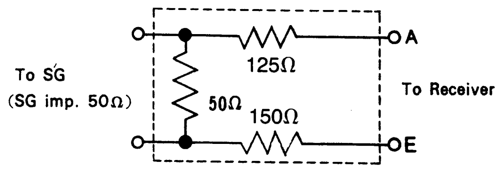


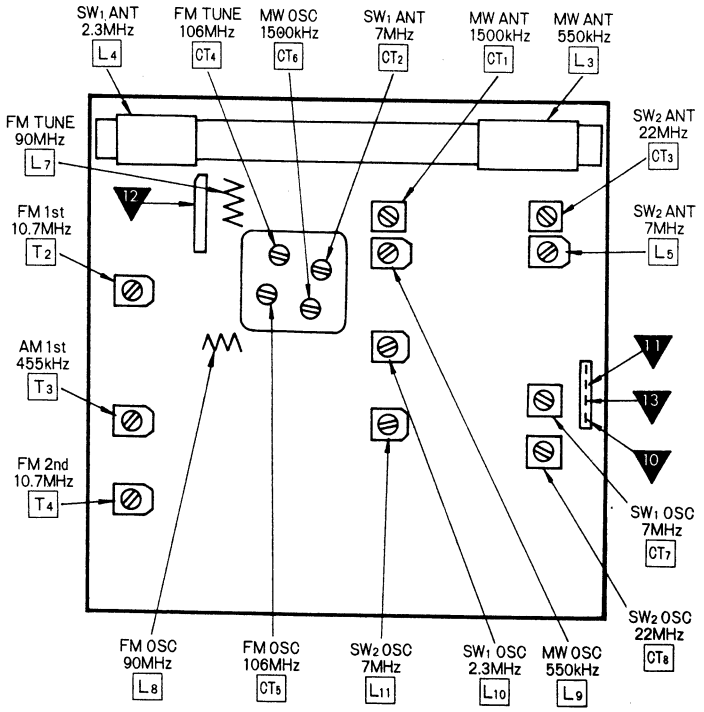
Fig. 16



To SG
(SG imp. 50Ω)
125Ω
50Ω
150Ω
A
E
To Receiver

Fig. 17 FM Dummy Antenna

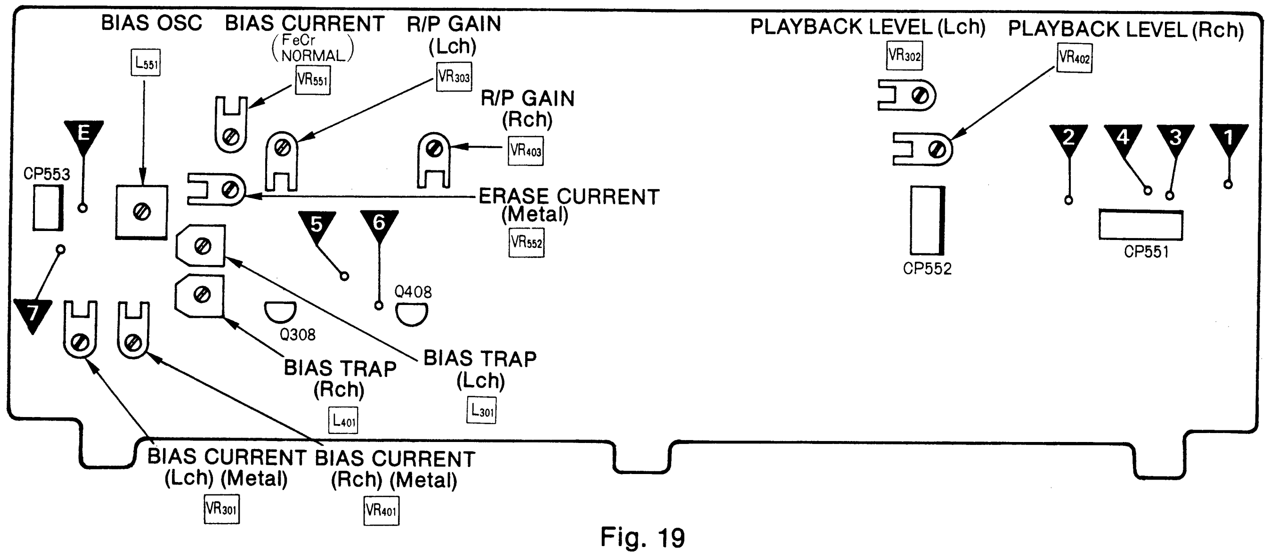
RADIO CIRCUIT BOARD



SW₁ ANT 2.3MHz L4
FM TUNE 106MHz CT4
MW OSC 1500kHz CT6
SW₁ ANT 7MHz CT2
MW ANT 1500kHz CT1
MW ANT 550kHz L3
FM TUNE 90MHz L7
FM 1st 10.7MHz T2
AM 1st 455kHz T3
FM 2nd 10.7MHz T4
SW₂ ANT 22MHz CT3
SW₂ ANT 7MHz L5
12
11
13
10
SW₁ OSC 7MHz CT7
SW₂ OSC 22MHz CT8
FM OSC 90MHz L8
FM OSC 106MHz CT5
SW₂ OSC 7MHz L11
SW₁ OSC 2.3MHz L10
MW OSC 550kHz L9

Fig. 18

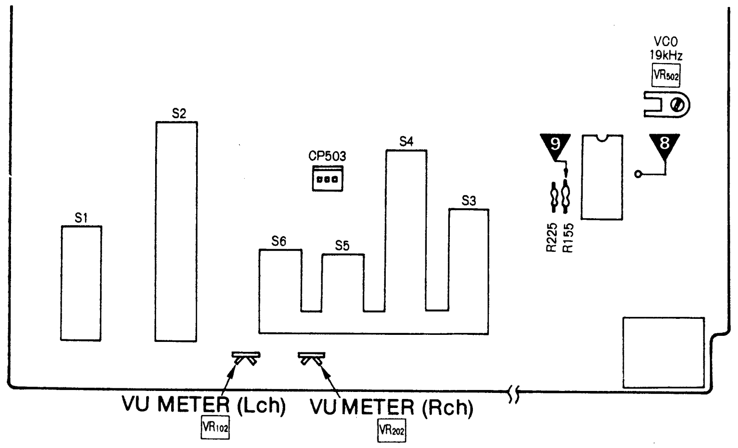
AUDIO CIRCUIT BOARD



BIAS OSC L551
BIAS CURRENT (FeCr NORMAL) VR551
R/P GAIN (Lch) VR303
R/P GAIN (Rch) VR403
PLAYBACK LEVEL (Lch) VR302
PLAYBACK LEVEL (Rch) VR402
E
CP553
ERASE CURRENT (Metal) VR552
5
6
7
2
4
3
1
Q408
Q308
BIAS TRAP (Rch) L401
BIAS TRAP (Lch) L301
CP552
CP551
BIAS CURRENT (Lch) (Metal) VR301
BIAS CURRENT (Rch) (Metal) VR401

Fig. 19

AUDIO CIRCUIT BOARD



VCO 19kHz VR502
S2
CP503
S4
S3
S1
S6
S5
9
8
R225
R155
VU METER (Lch) VR102
VU METER (Rch) VR202

Fig. 20

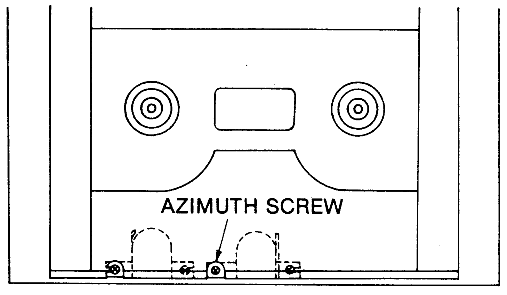
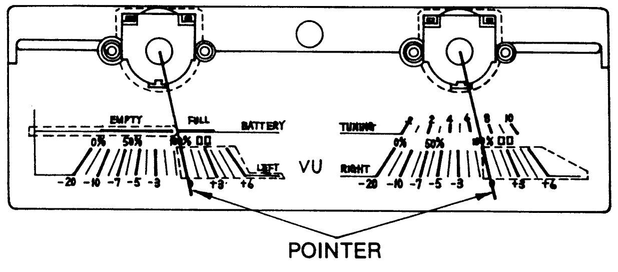

AZIMUTH SCREW

Fig. 21

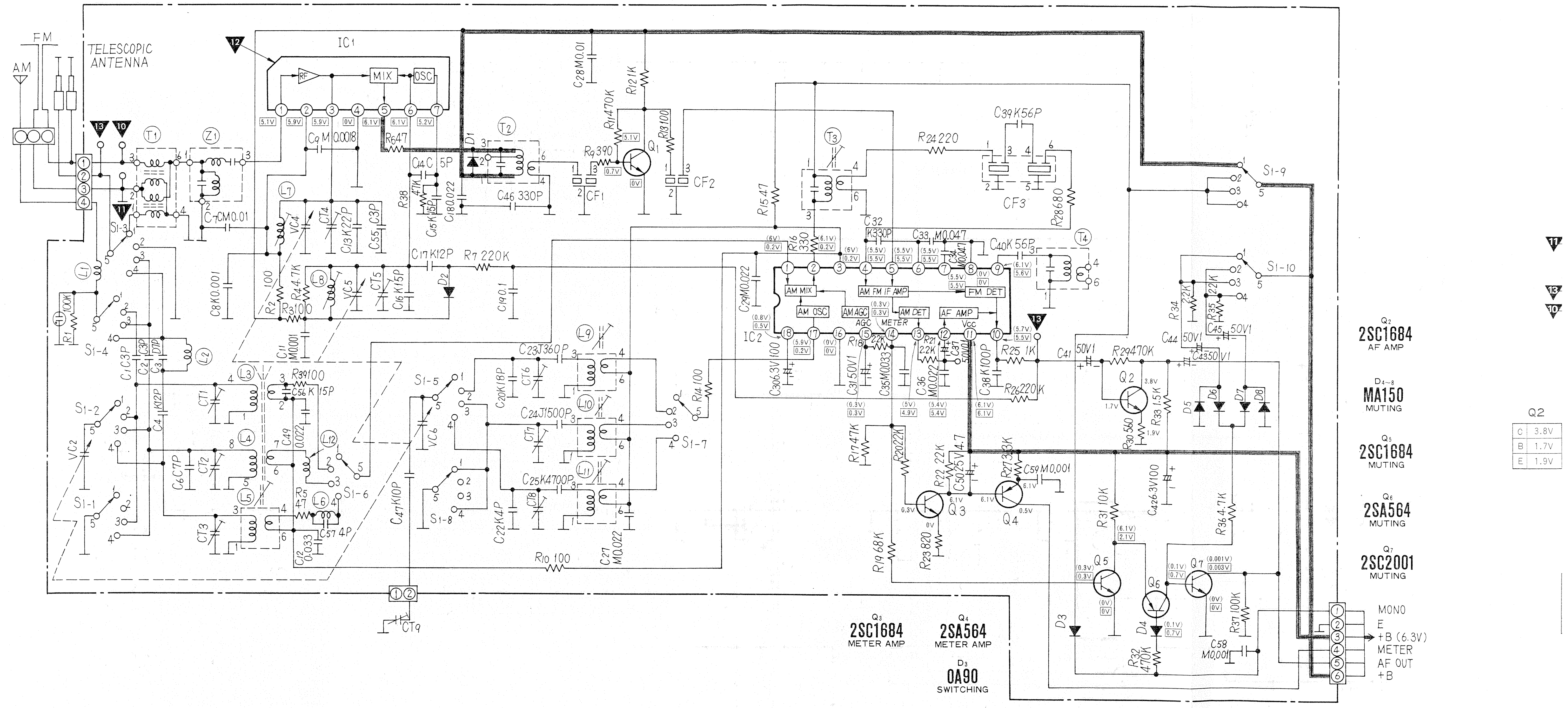


EMPTY
FULL
BATTERY
TUNING
LEFT
RIGHT
VU
POINTER

Fig. 22

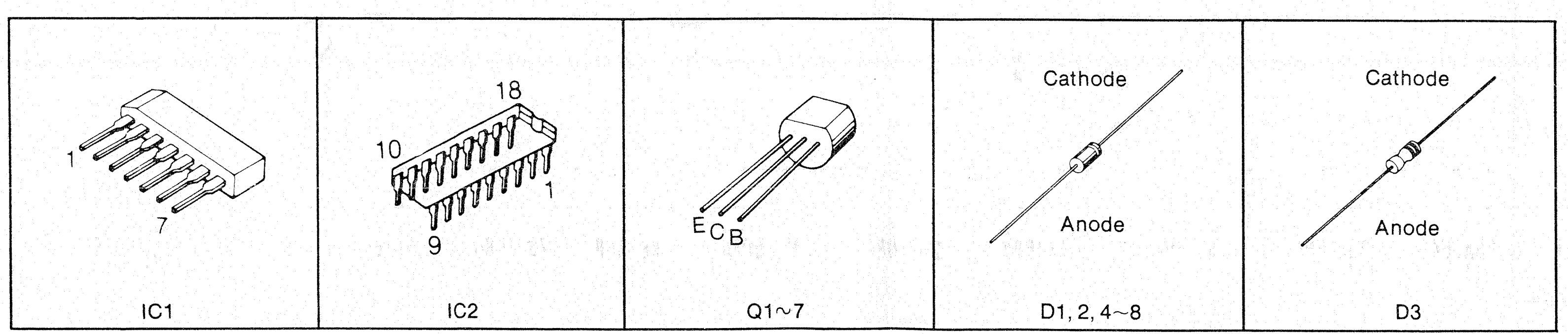
SCHEMATIC DIAGRAM (RADIO CIRCUIT) MODEL RX-7000F

IC₁	D₂	D₁	Q₁	IC₂
AN7213	**RVDSD113**	**MA150**	**2SC1359**	**AN7220**
FM OSC MIX	FM AFC	FM D. AGC	FM IF AMP	AM CONV & FM-AM IF AMP

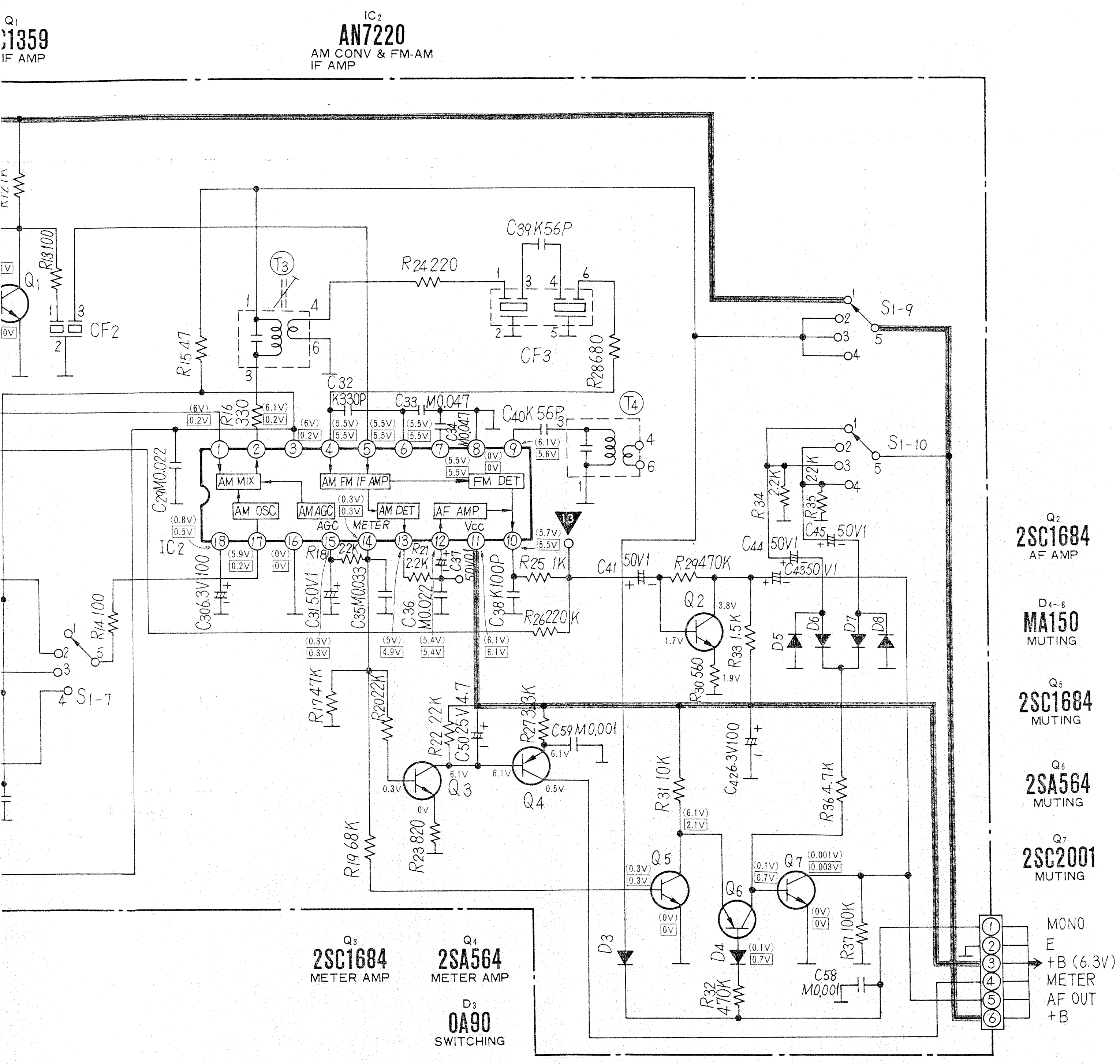

FM
AM
TELESCOPIC ANTENNA
IC1
RF
MIX
OSC
T1
T2
T3
T4
Z1
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
L12
VC1
VC2
VC5
VC6
CT1
CT2
CT3
CT4
CT5
CT6
CT7
CT8
CT9
CF1
CF2
CF3
C9 M0.0018
R6 47
C4C 5P
R38 47K
C15 K15P
C18 0.022
C46 330P
C7 CM0.01
C13 K22P
C55
C3P
C17 K12P
R7 220K
C8 K0.001
R2 100
R4 4.7K
R3 100
C16 K15P
C19 0.1
C11 M0.001
C1 C3P
C2 C3P
C3 D1P
C4 K12P
C6 C7P
R39 100
C56 K 15P
C49 0.022
R5 47
C57 4P
C12 0.033
C47 K10P
C20 K18P
C23 J360P
C24 J1500P
C25 K4700P
C22 K4P
R10 100
C27 M0.022
C28 M0.01
R1 21K
R11 470K
R9 390
R13 100
Q1
C39 K56P
R24 220
R28 680
R15 47
R16 330
C32 K330P
C33 M0.047
C34 M0.047
C40 K56P
C29 M0.022
IC2
AM MIX
AM OSC
AM AGC
AM FM IF AMP
AM DET
AF AMP
FM DET
AGC
METER
Vcc
C30 6.3V 100
C31 50V1
C35 M0.0033
C36 M0.022
C37 50V1
R18 22K
R21 2.2K
C38 K100P
R25 1K
R26 220K
R17 47K
R20 22K
R22 22K
C50 25V 4.7
R27 3.3K
C59 M0.001
R19 68K
R23 820
R14 100
C41 50V1
R29 470K
C44 50V1
C45 50V1
C43 50V1
R34 22K
R35 22K
R33 1.5K
R30 560
C42 6.3V 100
R31 10K
R36 4.7K
R37 100K
R32 470K
C58 M0.001
Q2
Q3
Q4
Q5
Q6
Q7
D1
D2
D3
D4
D5
D6
D7
D8
S1-1
S1-2
S1-3
S1-4
S1-5
S1-6
S1-7
S1-8
S1-9
S1-10
MONO
E
+B (6.3V)
METER
AF OUT
+B
Q₂ 2SC1684 AF AMP
D₄~₈ MA150 MUTING
Q₅ 2SC1684 MUTING
Q₆ 2SA564 MUTING
Q₇ 2SC2001 MUTING
Q₃ 2SC1684 METER AMP
Q₄ 2SA564 METER AMP
D₃ OA90 SWITCHING

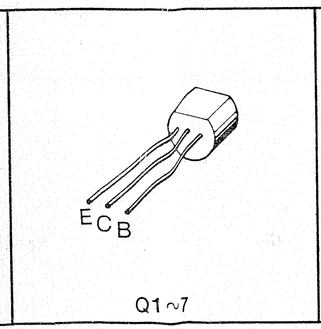
Q2	
C	3.8V
B	1.7V
E	1.9V

Notes:
1. DC voltage measurements are taken with electronics voltmeter based on negative terminal of battery.
   ☐ ... FM ( ) ... MW
2. S8-1~S8-4: Band switch in "FM" position.
   (1 . . . FM, 2 . . . MW, 3 . . . SW1, 4 . . . SW2)

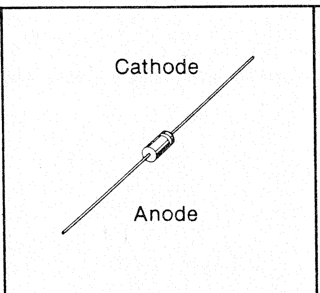

1
7
18
10
1
9
E
C
B
Cathode
Anode
Cathode
Anode
IC1
IC2
Q1~7
D1, 2, 4~8
D3

M (RADIO CIRCUIT) MODEL RX-7000F

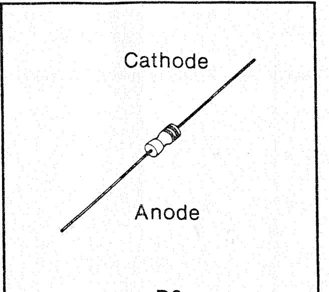

Q1
1359
IF AMP
IC2
AN7220
AM CONV & FM-AM IF AMP
AM MIX
AM OSC
AM AGC
AGC
METER
AM DET
AF AMP
Vcc
AM FM IF AMP
FM DET
T3
T4
CF2
CF3
C39 K56P
R24 220
C40 K 56P
S1-9
S1-10
S1-7
Q2
2SC1684
AF AMP
D4~8
MA150
MUTING
Q5
2SC1684
MUTING
Q6
2SA564
MUTING
Q7
2SC2001
MUTING
Q3
2SC1684
METER AMP
Q4
2SA564
METER AMP
D3
OA90
SWITCHING
MONO
E
+B (6.3V)
METER
AF OUT
+B



Q1~7

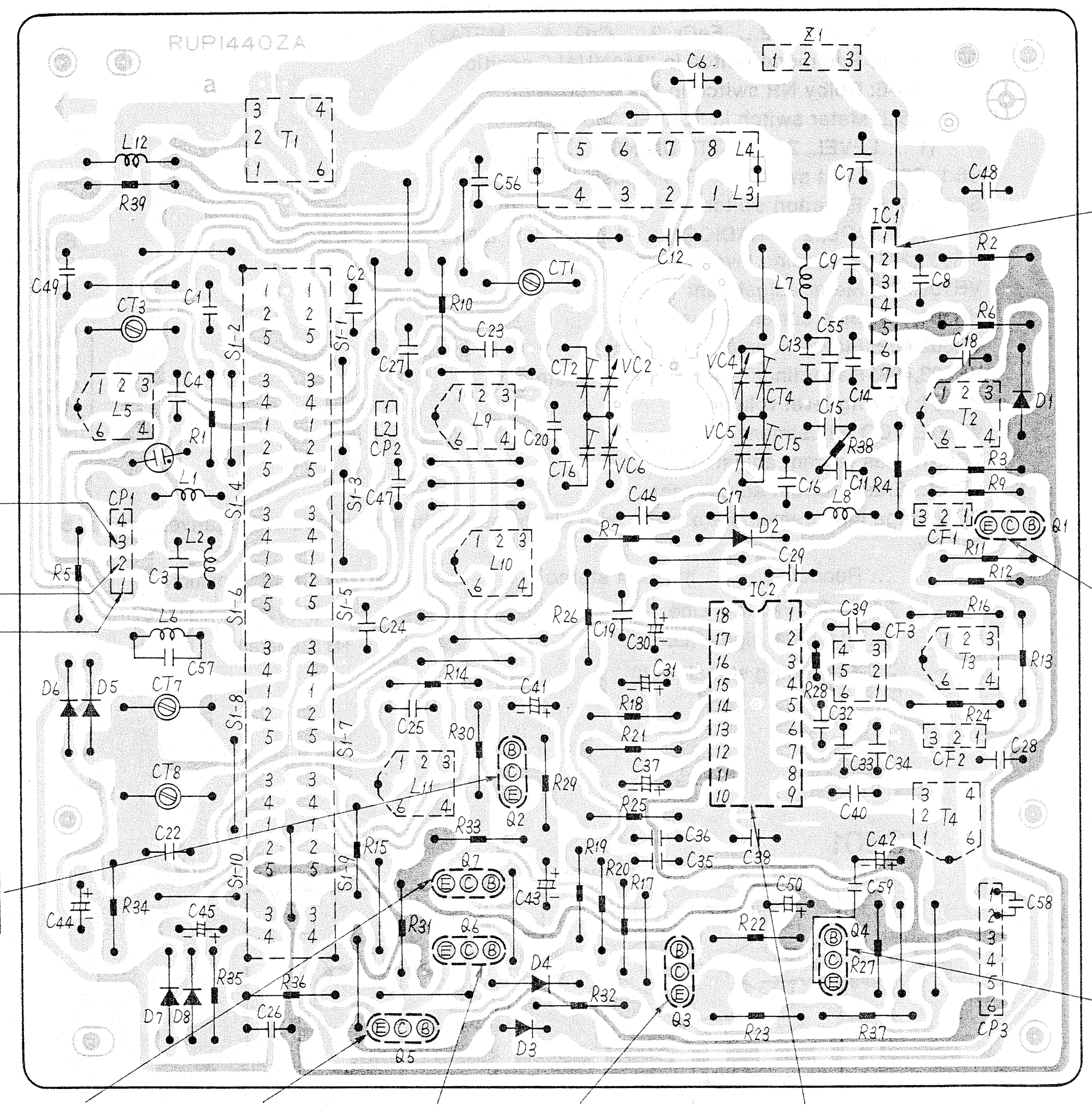

Cathode
Anode

D1, 2, 4~8


Cathode
Anode

D3

RADIO CIRCUIT BOARD


RUP1440ZA
T1
L4
L3
L12
R39
C56
C7
C48
IC1
C12
CT1
CT3
CT2
VC2
VC4
CT4
VC5
CT5
VC6
CT6
L5
L9
L10
L6
L11
L2
T2
T3
T4
CF1
CF2
CF3
CP1
CP2
CP3
IC2
Q1
Q2
Q3
Q4
Q5
Q6
Q7
D1
D2
D3
D4
D5
D6
D7
D8
S1-1
S1-2
S1-3
S1-4
S1-5
S1-6
S1-7
S1-8
S1-9
S1-10
11
13
10

Q2

C	3.8V
B	1.7V
E	1.9V

IC1

	FM
1	5.1V
2	5.9V
3	5.9V
4	0V
5	6.1V
6	6.1V
7	5.2V

Q1

	FM
C	5.1V
B	0.7V
E	0V

Q4

C	0.5V
B	6.1V
E	6.1V

Q7

	FM	AM
C	0.003V	0.001V
B	0.7V	0.1V
E	0V	0V

Q5

	FM	AM
C	2.1V	6.1V
B	0.3V	0.3V
E	0V	0V

Q6

	FM	AM
C	0.7V	0.1V
B	0.7V	0.1V
E	2.1V	6.1V

Q3

C	6.1V
B	0.3V
E	0V

IC2

	FM	AM		FM	AM
1	0.2V	6V	10	5.5V	5.7V
2	0.2V	6V	11	6.1V	6.1V
3	0.2V	6V	12	5.4V	5.4V
4	5.5V	5.5V	13	4.9V	5V
5	5.5V	5.5V	14	0.3V	0.3V
6	5.5V	5.5V	15	0.3V	0.3V
7	5.5V	5.5V	16	0V	0V
8	0V	0V	17	0.2V	5.9V
9	5.6V	6.1V	18	0.5V	0.8V

SCHEMATIC DIAGRAM (AUDIO CIRCUIT) MOD

Notes:

1. S1-1~S1-4: Mode/Beat Proof switch in "MONO/II" position
   (1 ... MONO/II, 2 ... STEREO/II, 3 ... AMBIENCE/I)
2. S2-1~S2-4: Tape selector switch in "NORMAL" position
   (1 ... NORMAL, 2 ... FeCr, 3 ... CrO₂, 4 ... METAL)
3. S3-1~S3-4: Rec mode switch in "MANUAL" position
4. S4-1~S4-6: Dolby NR switch in "OUT" position
5. S5-1, S5-2: Meter switch in "LEVEL" position
   (1 ... LEVEL, 2 ... BATT/TUNING)
6. S6-1, S6-2: Light switch in "OFF" position
7. S7-1~S7-6: Function switch in "TAPE" position
   (1 ... TAPE, 2 ... RADIO, 3 ... PHONO, 4 ... LINE)
8. VR101,201: Recording level control
   VR102,202: Meter adjustment
   VR301,401: Bias current adjustment
   VR302,402: Playback gain adjustment
   VR303,403: Recording/Playback gain adjustment
   VR501: Mixing level volume
   VR502: VCO adjustment
   VR551: Bias current adjustment
   VR552: Erase current adjustment
9. DC voltage mesurements are taken with electronics voltmeter based on negative terminal of battery.

[ ] ... Recoding, (( )) ... FM stereo

☐ ... Radio, Phono or Line

⇦ ... Playback signal (Lch)

⇦ ... Recording signal (Rch)

▨ ----- +B (Record Position)

▨ ▨ ----- +B (Playback Position)

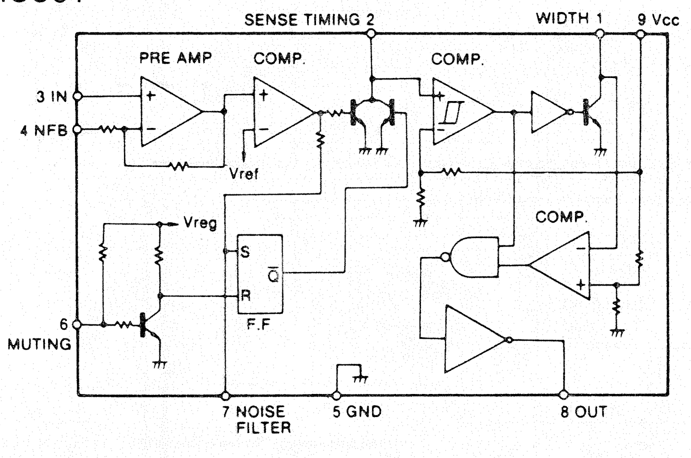
■ ----- +B (General)

Bias Frequency
67.5 ±0.5 kHz
(Beat Proof II)

Bias Voltage

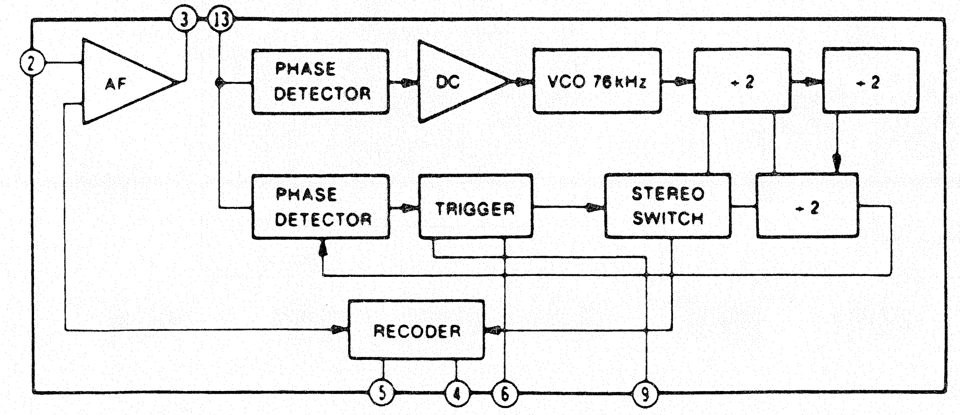
METAL	7 ± 0.2 mV
CrO₂	4.5 ± 0.2 mV
FeCr Normal	3.5 ± 0.1 mV

IC501

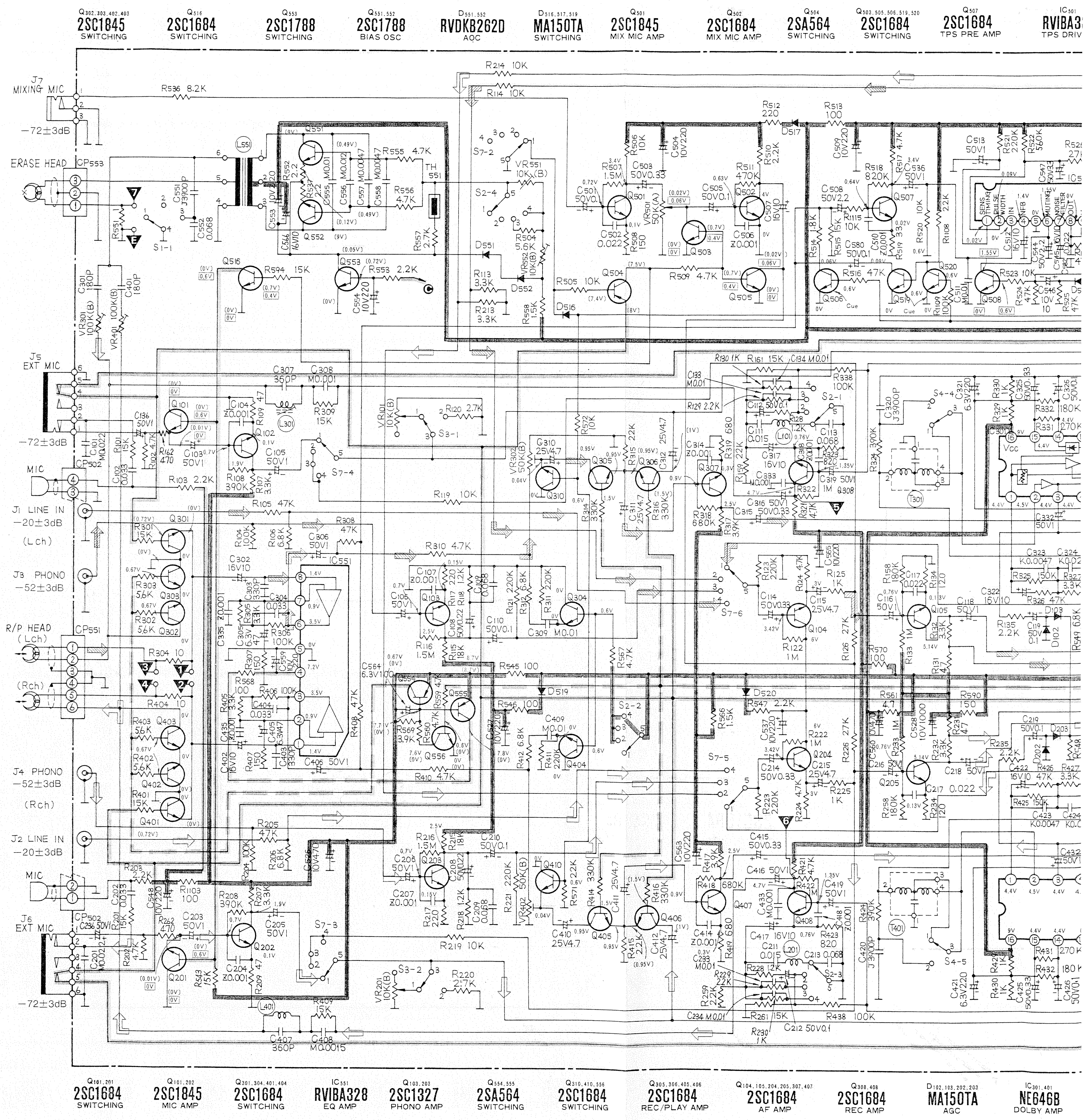


SENSE TIMING 2
WIDTH 1
9 Vcc
PRE AMP
COMP.
COMP.
3 IN
4 NFB
Vref
Vreg
COMP.
S
Q̄
R
F.F
6 MUTING
7 NOISE FILTER
5 GND
8 OUT

IC502

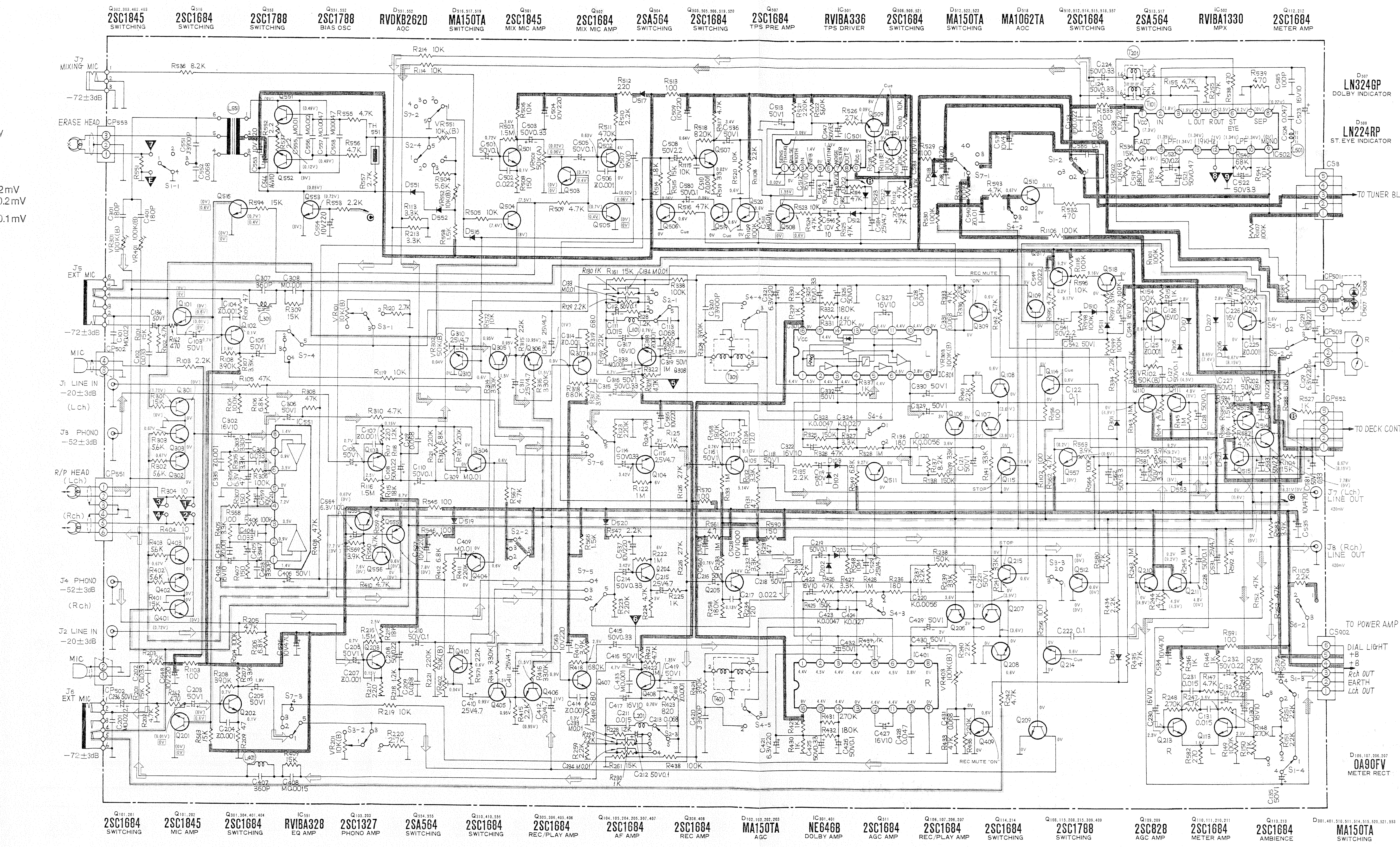


2
3
13
AF
PHASE DETECTOR
DC
VCO 76kHz
÷2
÷2
PHASE DETECTOR
TRIGGER
STEREO SWITCH
÷2
RECODER
5
4
6
9



Q302,303,402,403 2SC1845 SWITCHING
Q516 2SC1684 SWITCHING
Q553 2SC1788 SWITCHING
Q551,552 2SC1788 BIAS OSC
D551,552 RVDKB262D AOC
D516,517,519 MA150TA SWITCHING
Q501 2SC1845 MIX MIC AMP
Q502 2SC1684 MIX MIC AMP
Q504 2SA564 SWITCHING
Q503,505,506,519,520 2SC1684 SWITCHING
Q507 2SC1684 TPS PRE AMP
IC501 RVIBA3 TPS DRIV
J7 MIXING MIC
-72±3dB
ERASE HEAD
J5 EXT MIC
-72±3dB
MIC
J1 LINE IN -20±3dB (Lch)
J3 PHONO -52±3dB
R/P HEAD (Lch)
(Rch)
J4 PHONO -52±3dB (Rch)
J2 LINE IN -20±3dB
MIC
J6 EXT MIC
-72±3dB
Q101,201 2SC1684 SWITCHING
Q101,202 2SC1845 MIC AMP
Q301,304,401,404 2SC1684 SWITCHING
IC551 RVIBA328 EQ AMP
Q103,203 2SC1327 PHONO AMP
Q554,555 2SA564 SWITCHING
Q310,410,556 2SC1684 SWITCHING
Q305,306,405,406 2SC1684 REC/PLAY AMP
Q104,105,204,205,307,407 2SC1684 AF AMP
Q308,408 2SC1684 REC AMP
D102,103,202,203 MA150TA AGC
IC301,401 NE646B DOLBY AMP

SCHEMATIC DIAGRAM (AUDIO CIRCUIT) MODEL RX-7000F


Q302, 303, 402, 403 2SC1845 SWITCHING
Q516 2SC1684 SWITCHING
Q553 2SC1788 SWITCHING
Q551, 552 2SC1788 BIAS OSC
D551, 552 RVDKB262D AOC
D516, 517, 519 MA150TA SWITCHING
Q501 2SC1845 MIX MIC AMP
Q502 2SC1684 MIX MIC AMP
Q504 2SA564 SWITCHING
Q503, 505, 506, 519, 520 2SC1684 SWITCHING
Q507 2SC1684 TPS PRE AMP
IC501 RVIBA336 TPS DRIVER
Q508, 509, 521 2SC1684 SWITCHING
D512, 522, 523 MA150TA SWITCHING
D518 MA1062TA AOC
Q510, 512, 514, 515, 518, 557 2SC1684 SWITCHING
Q513, 517 2SA564 SWITCHING
IC502 RVIBA1330 MPX
Q112, 212 2SC1684 METER AMP
D507 LN324GP DOLBY INDICATOR
D508 LN224RP ST. EYE INDICATOR
J7 MIXING MIC
−72±3dB
ERASE HEAD
CP553
2mV
.2mV
.1mV
TO TUNER BLOCK
J5 EXT MIC
−72±3dB
MIC
J1 LINE IN −20±3dB (Lch)
J3 PHONO −52±3dB
R/P HEAD (Lch)
(Rch)
J4 PHONO −52±3dB (Rch)
J2 LINE IN −20±3dB
MIC
J6 EXT MIC
−72±3dB
CP501
CP503
CP552
TO DECK CONTROL
J7 (Lch) LINE OUT
J8 (Rch) LINE OUT
TO POWER AMP
CS902
DIAL LIGHT
+B
+B
Rch OUT
EARTH
Lch OUT
REC MUTE "ON"
STOP
Cue
D106, 107, 206, 207 OA90FV METER RECT
Q101, 201 2SC1684 SWITCHING
Q101, 202 2SC1845 MIC AMP
Q301, 304, 401, 404 2SC1684 SWITCHING
IC551 RVIBA328 EQ AMP
Q103, 203 2SC1327 PHONO AMP
Q554, 555 2SA564 SWITCHING
Q310, 410, 556 2SC1684 SWITCHING
Q305, 306, 405, 406 2SC1684 REC/PLAY AMP
Q104, 105, 204, 205, 307, 407 2SC1684 AF AMP
Q308, 408 2SC1684 REC AMP
D102, 103, 202, 203 MA150TA AGC
IC301, 401 NE646B DOLBY AMP
Q511 2SC1684 AGC AMP
Q106, 107, 206, 207 2SC1684 REC/PLAY AMP
Q114, 214 2SC1684 SWITCHING
Q108, 115, 208, 215, 309, 409 2SC1788 SWITCHING
Q109, 209 2SC828 AGC AMP
Q110, 111, 210, 211 2SC1684 METER AMP
Q113, 213 2SC1684 AMBIENCE
D301, 401, 510, 511, 514, 515, 520, 521, 553 MA150TA SWITCHING

AUDIO CIRCUIT BOARD

Q402

V_E	0V
V_B	0.67V
V_C	0V

IC551

1	1.4V	4	7.2V	7	0.9V
2	0.9V	5	0V	8	1.4V
3	3.5V	6	3.5V		

Q401

	REC
V_E	0V
V_B	0.72V
V_C	0V

Q403

V_E	0V
V_B	0.67V
V_C	0V

Q304

V_E	0V
V_B	0.6V
V_C	0V

Q410

V_E	0.04V
V_B	0.6V
V_C	0V

Q310

V_E	0.04V
V_B	0.6V
V_C	0V

Q305

V_E	0.95V
V_B	1.5V
V_C	0.95V

Q306

	REC
V_E	0.95V
V_B	1.5V
V_C	1V

Q307

V_E	0.3V
V_B	0.9V
V_C	2.5V

IC301

1	4.4V	5	4.4V	9	0V	13	0V
2	4.5V	6	4.5V	10	4.4V	14	4.4V
3	4.4V	7	3.8V	11	4.4V	15	4.4V
4	4.4V	8	0V	12	4.4V	16	9V

Q557

	REC
V_E	0V
V_B	0.6V
V_C	8.2V

Q551

	REC
V_E	0.12V
V_B	0.49V
V_C	9V

Q552

	REC
V_E	0.12
V_B	0.49
V_C	9V

Q301

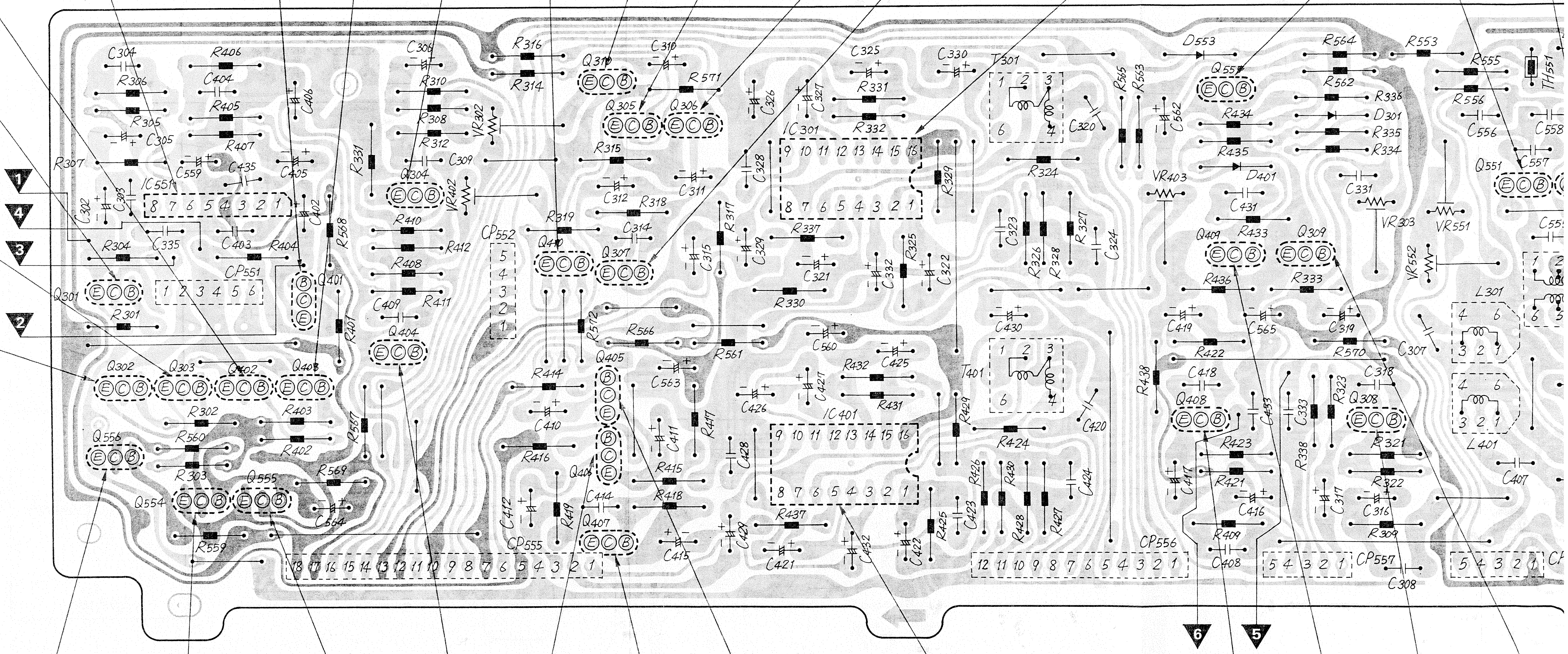
	REC
V_E	0V
V_B	0.72V
V_C	0V

Q303

V_E	0V
V_B	0.67V
V_C	0V

Q302

V_E	0V
V_B	0.67V
V_C	0V


1
2
3
4
5
6
C304
R406
C404
R405
R407
C406
R306
R305
C305
R307
C559
C435
C405
IC551
8 7 6 5 4 3 2 1
C302
C303
C335
C403
R404
C402
R304
CP551
1 2 3 4 5 6
Q301
R301
Q401
R401
R568
R331
C306
R310
R308
R312
C309
VR302
Q304
VR402
R410
R412
R408
C409
R411
Q404
CP552
5 4 3 2 1
R316
R314
Q310
C310
R571
Q305
Q306
R315
C312
R318
C311
C314
R319
Q410
Q307
R572
R566
R561
Q405
C563
C326
C327
IC301
R332
R331
C325
C330
C328
9 10 11 12 13 14 15 16
8 7 6 5 4 3 2 1
R329
R317
C315
C329
R337
C321
R330
C332
R325
C322
T301
C320
R324
R565
R563
C562
C323
R326
R328
R327
C324
C430
C560
C425
R432
C421
C426
R431
IC401
R417
C428
C411
R415
R418
C414
R437
C429
C432
C422
R425
C423
R426
R430
R428
R427
C424
R424
R429
T401
C420
C415
C421
Q407
Q406
R419
C412
CP555
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
Q302
Q303
Q402
Q403
R302
R403
R560
R402
Q556
R303
Q555
R569
Q554
C564
R559
R557
R414
C410
R416
D553
Q557
R564
R553
R555
R562
R336
D301
R335
R334
R434
R435
D401
VR403
C431
C331
VR303
VR551
Q409
R433
Q309
R436
R333
VR552
C419
C565
C319
R422
R570
C307
R438
C418
C318
Q408
C433
C333
R323
Q308
R423
R421
R338
R321
R322
C417
C416
C317
C316
R409
R309
C408
CP556
12 11 10 9 8 7 6 5 4 3 2 1
5 4 3 2 1
CP557
C308
5 4 3 2 1
R556
C556
C558
C557
Q551
TH551
L301
L401
C407

Q556

	PLAY	REC
V_E	0V	0V
V_B	0.6V	0V
V_C	7.6V	0V

Q554

	PLAY	REC
V_E	8.7V	8.7V
V_B	7.7V	0V
V_C	0.67V	0V

Q555

	PLAY	REC
V_E	8.7V	8.7V
V_B	7.7V	0V
V_C	7.8V	0V

Q404

V_E	0V
V_B	0.6V
V_C	0V

Q406

	REC
V_E	0.95V
V_B	1.5V
V_C	1V

Q407

V_E	0.3V
V_B	0.9V
V_C	2.5V

Q405

V_E	0.95V
V_B	1.5V
V_C	0.95V

IC401

1	4.4V	5	4.4V	9	0V	13	0V
2	4.5V	6	4.5V	10	4.4V	14	4.4V
3	4.4V	7	3.8V	11	4.4V	15	4.4V
4	4.4V	8	0V	12	4.4V	16	9V

Q408

V_E	0.76V
V_B	1.35V
V_C	4.7V

Q409

	REC MUTE "ON"
V_E	0V
V_B	0.6V
V_C	0V

Q308

V_E	0.76V
V_B	1.35V
V_C	4.7V

Q309

	REC MUTE "ON"
V_E	0V
V_B	0.6V
V_C	0V

AUDIO CIRCUIT BOARD

Q410

V_E	0.04V
V_B	0.6V
V_C	0V

Q310

V_E	0.04V
V_B	0.6V
V_C	0V

Q305

V_E	0.95V
V_B	1.5V
V_C	0.95V

Q306

	REC
V_E	0.95V
V_B	1.5V
V_C	1V

Q307

V_E	0.3V
V_B	0.9V
V_C	2.5V

IC301

1	4.4V	5	4.4V	9	0V	13	0V
2	4.5V	6	4.5V	10	4.4V	14	4.4V
3	4.4V	7	3.8V	11	4.4V	15	4.4V
4	4.4V	8	0V	12	4.4V	16	9V

Q557

	REC
V_E	0V
V_B	0.6V
V_C	8.2V

Q551

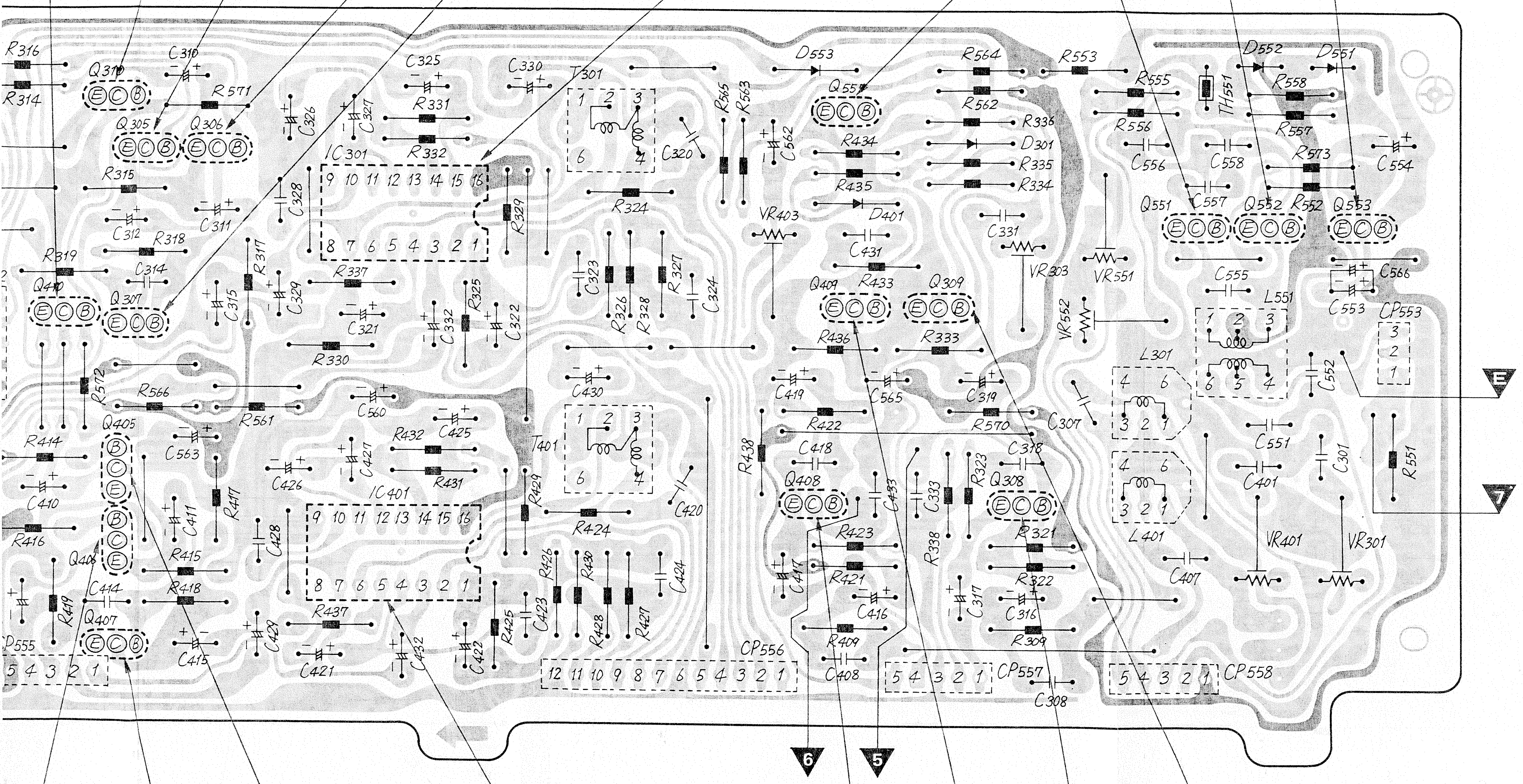
	REC
V_E	0.12V
V_B	0.49V
V_C	9V

Q552

	REC
V_E	0.12V
V_B	0.49V
V_C	9V

Q553

	REC
V_E	0V
V_B	0.72V
V_C	0.05V


R316
R314
Q310
C310
R571
Q305
Q306
C326
C327
C325
R331
R332
C330
T301
IC301
9 10 11 12 13 14 15 16
8 7 6 5 4 3 2 1
R315
C328
C311
C312
R318
R329
C320
R324
R565
R563
C562
D553
Q557
R434
R435
D401
VR403
C431
R564
R562
R336
D301
R335
R334
R553
R555
R556
C556
TH551
D552
D551
R558
R557
C558
R573
C554
Q551
C557
Q552
R552
Q553
C331
VR303
VR551
R319
Q410
Q307
C314
R317
C315
C329
R337
C321
C332
R325
C322
C323
R326
R328
R327
C324
Q409
R433
Q309
R436
R333
C555
L551
C566
C553
CP553
R330
R572
R566
C430
C419
C565
C319
VR552
L301
C552
E
R414
Q405
C563
R561
C560
R432
C425
C427
C426
R431
IC401
T401
R429
C420
R422
C418
R438
R570
C307
C318
C551
C401
C301
R551
7
C410
R416
Q406
C411
R417
C428
9 10 11 12 13 14 15 16
8 7 6 5 4 3 2 1
R424
Q408
C433
C333
R323
Q308
R423
R321
L401
VR401
VR301
R415
R418
C414
R419
Q407
C429
R437
R426
R430
C424
C417
R421
R338
C317
R322
C416
C316
C407
P555
5 4 3 2 1
C415
C421
C432
C422
R425
C423
R428
R427
CP556
12 11 10 9 8 7 6 5 4 3 2 1
R409
C408
5 4 3 2 1
CP557
C308
R309
5 4 3 2 1
CP558
6
5

Q406

	REC
V_E	0.95V
V_B	1.5V
V_C	1V

Q407

V_E	0.3V
V_B	0.9V
V_C	2.5V

Q405

V_E	0.95V
V_B	1.5V
V_C	0.95V

IC401

1	4.4V	5	4.4V	9	0V	13	0V
2	4.5V	6	4.5V	10	4.4V	14	4.4V
3	4.4V	7	3.8V	11	4.4V	15	4.4V
4	4.4V	8	0V	12	4.4V	16	9V

Q408

V_E	0.76V
V_B	1.35V
V_C	4.7V

Q409

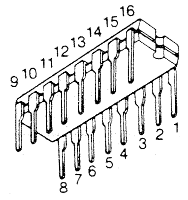
	REC MUTE "ON"
V_E	0V
V_B	0.6V
V_C	0V

Q308

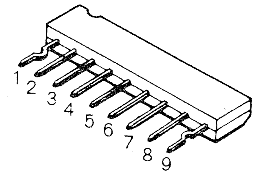
V_E	0.76V
V_B	1.35V
V_C	4.7V

Q309

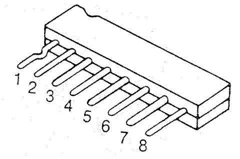
	REC MUTE "ON"
V_E	0V
V_B	0.6V
V_C	0V


9 10 11 12 13 14 15 16
8 7 6 5 4 3 2 1

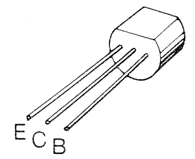
IC301,401,502



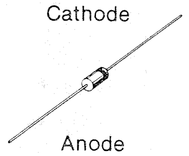
IC501



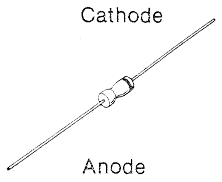
IC551



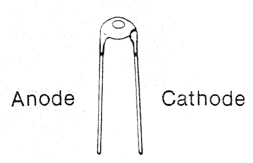
Q101~115,201~215, 301~310,401~410, 501~521,551~557


Cathode
Anode

D102,103,202,203, 301,401,510~512, 514~523,553


Cathode
Anode

D106,107, 206,207


Anode
Cathode

D551,552

AUDIO CIRCUIT BOARD

Q109

VE	0V
VB	0V
VC	0V

Q511

VE	0V
VB	0V
VC	9.27V

Q209

VE	0V
VB	0V
VC	0V

Q512

	PLAY	REC
VE	0V	0V
VB	0.6V	0V
VC	0V	0V

Q204

VE	3V
VB	3.42V
VC	6V

Q206

VE	3V
VB	3.6V
VC	3V

Q207

VE	3V
VB	3.9V
VC	3.6V

Q104

VE	3V
VB	3.42V
VC	6V

Q106

VE	3V
VB	3.6V
VC	3V

Q108

VE	0V
VB	0.6V
VC	0V

Q214

	Cue
VE	0V
VB	0.6V
VC	0V

Q504

	REC
VE	8V
VB	7.4V
VC	7.5V

Q208

VE	0V
VB	0.6V
VC	0V

Q505

	REC	
VE	0V	0V
VB	0.7V	0.4V
VC	0.02V	0.06V

Q510

	DOLBY-ON
VE	0V
VB	0.67V
VC	0.1V

Q212

VE	0V
VB	0.6V
VC	2.8V

Q112

VE	0V
VB	0.6V
VC	2.8V

Q213

VE	1.6V
VB	2.3V
VC	5.6V

Q113

VE	1.6V
VB	2.3V
VC	5.6V

Q517

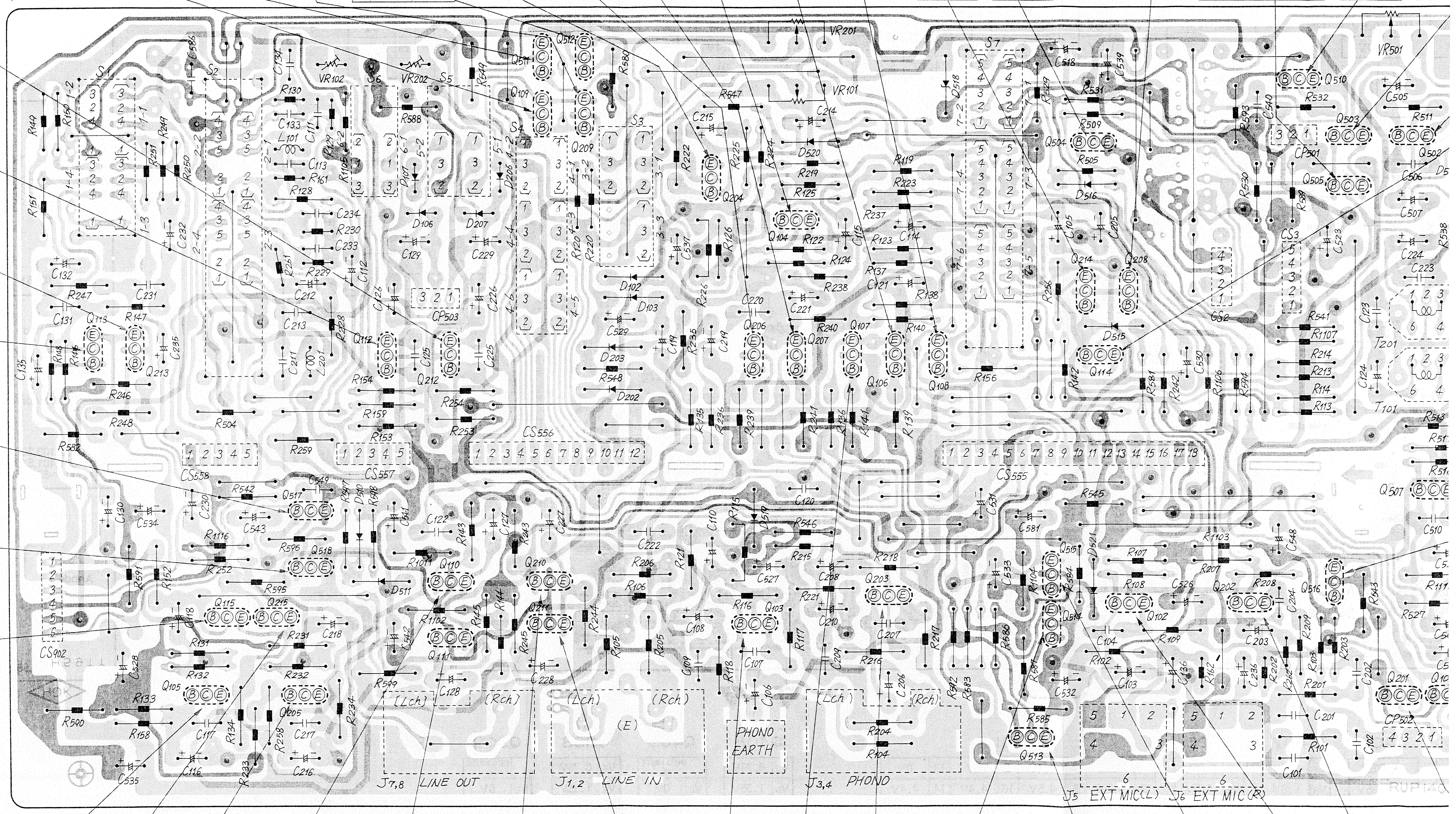
VE	9.2V
VB	9.17V
VC	0.2V

Q518

VE	0V
VB	0V
VC	9.16V

Q115

	STOP
VE	0V
VB	0.6V
VC	0V


S1
S2
S3
S4
S5
S6
S7
VR101
VR102
VR201
VR202
VR501
CP501
CP502
CP503
CS3
CS556
CS555
CS557
CS558
CS902
T101
T201
J7,8 LINE OUT
J1,2 LINE IN
J3,4 PHONO
PHONO EARTH
J5 EXT MIC(L)
J6 EXT MIC(R)
[Lch]
[Rch]
(Lch)
(Rch)
(E)

Q105

VE	0.13V
VB	0.76V
VC	5.14V

Q215

	STOP
VE	0V
VB	0.6V
VC	0V

Q205

VE	0.13V
VB	0.76V
VC	5.14V

Q110

	PLAY	REC
VE	4.5V	4.5V
VB	0V	4.9V
VC	9.2V	9.2V

Q111

	PLAY	REC
VE	4.5V	4.5V
VB	4.8V	0V
VC	9.2V	9.2V

Q210

	PLAY	REC
VE	4.5V	4.5V
VB	0V	4.9V
VC	9.2V	9.2V

Q211

	PLAY	REC
VE	4.5V	4.5V
VB	4.8V	0V
VC	9.2V	9.2V

Q103

VE	0.15V
VB	0.7V
VC	2.5V

Q107

	REC
VE	3V
VB	3.9V
VC	3.6V

Q203

VE	0.15V
VB	0.7V
VC	2.5V

Q514

	PLAY	REC
VE	7.78V	0V
VB	8.31V	0V
VC	8.67V	8.15V

Q513

	PLAY	REC
VE	8.67V	8.15V
VB	8.65V	7.4V
VC	0V	8.0V

Q515

	PLAY	REC
VE	0V	0V
VB	0V	0.6V
VC	8.15V	0V

Q102

VE	0.1V
VB	0.7V
VC	1.9V

Q202

VE	0.1V
VB	0.7V
VC	1.9V

AUDIO CIRCUIT BOARD

Q204

VE	3V
VB	3.42V
VC	6V

Q206

VE	3V
VB	3.6V
VC	3V

Q207

VE	3V
VB	3.9V
VC	3.6V

Q104

VE	3V
VB	3.42V
VC	6V

Q106

VE	3V
VB	3.6V
VC	3V

Q108

VE	0V
VB	0.6V
VC	0V

Q214

	Cue
VE	0V
VB	0.6V
VC	0V

Q504

	REC
VE	8V
VB	7.4V
VC	7.5V

Q208

VE	0V
VB	0.6V
VC	0V

Q505

	REC	
VE	0V	0V
VB	0.7V	0.4V
VC	0.02V	0.06V

Q510

	DOLBY-ON
VE	0V
VB	0.67V
VC	0.1V

Q503

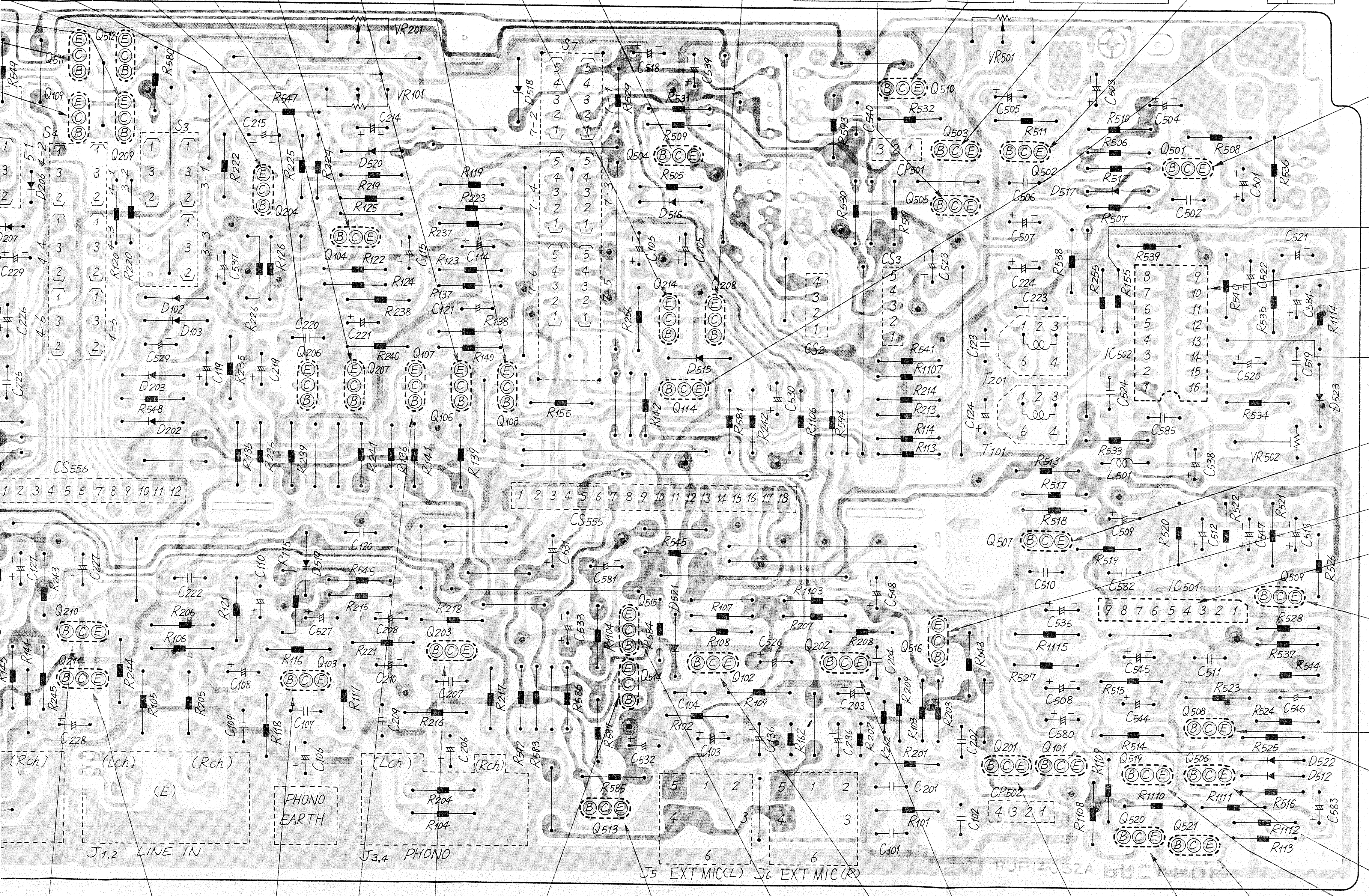
	REC	
VE	0V	0V
VB	0.7V	0.4V
VC	0.02V	0.06V

Q502

VE	0V
VB	0.63V
VC	4V

Q114

	Cue
VE	0V
VB	0.6V
VC	0V


VR201
VR101
VR501
VR502
S3
S4
S7
CS3
CS556
CS555
CP501
CP502
CS2
IC502
IC501
T201
T101
J1,2 LINE IN
J3,4 PHONO
J5 EXT MIC(L)
J6 EXT MIC(R)
PHONO EARTH
(Lch)
(Rch)
(E)
RUP1405ZA
9
8

Q501

VE	0.1V
VB	0.72V
VC	3.4V

IC502

	FM STEREO		FM STEREO
1	7.3V	9	0V
2	1.8V	10	1.34V
3	1.9V	11	1.34V
4	3.5V	12	1V
5	3.5V	13	1.34V
6	6.2V	14	1.34V
7	0V	15	1.35V
8	0.27V	16	1.9V

Q507

VE	0.02V
VB	0.64V
VC	3.4V

Q516

	REC	
VE	0V	0V
VB	0.7V	0.4V
VC	0V	0.6V

IC501

1	0.02V	4	1.4V	7	0V
2	0.09V	5	0V	8	0V
3	0V	6	1.55V	9	8V

Q509

	Cue
VE	0.09V
VB	0.6V
VC	8V

Q508

VE	0V
VC	0.6V
VC	1.55V

Q101

	REC	
VE	0.01V	0V
VB	0V	0.6V
VC	0V	0V

Q210

	PLAY	REC
	4.5V	4.5V
	0V	4.9V
	9.2V	9.2V

Q211

	PLAY	REC
VE	4.5V	4.5V
VB	4.8V	0V
VC	9.2V	9.2V

Q103

VE	0.15V
VB	0.7V
VC	2.5V

Q107

	REC
VE	3V
VB	3.9V
VC	3.6V

Q203

VE	0.15V
VB	0.7V
VC	2.5V

Q514

	PLAY	REC
VE	7.78V	0V
VB	8.31V	0V
VC	8.67V	8.15V

Q513

	PLAY	REC
VE	8.67V	8.15V
VB	8.65V	7.4V
VC	0V	8.0V

Q515

	PLAY	REC
VE	0V	0V
VB	0V	0.6V
VC	8.15V	0V

Q102

VE	0.1V
VB	0.7V
VC	1.9V

Q202

VE	0.1V
VB	0.7V
VC	1.9V

Q201

	REC	
VE	0.01V	0V
VB	0V	0.6V
VC	0V	0V

Q520

	Cue
VE	0V
VB	0.6V
VC	0.6V

Q521

	Cue
VE	0V
VB	0.6V
VC	7.6V

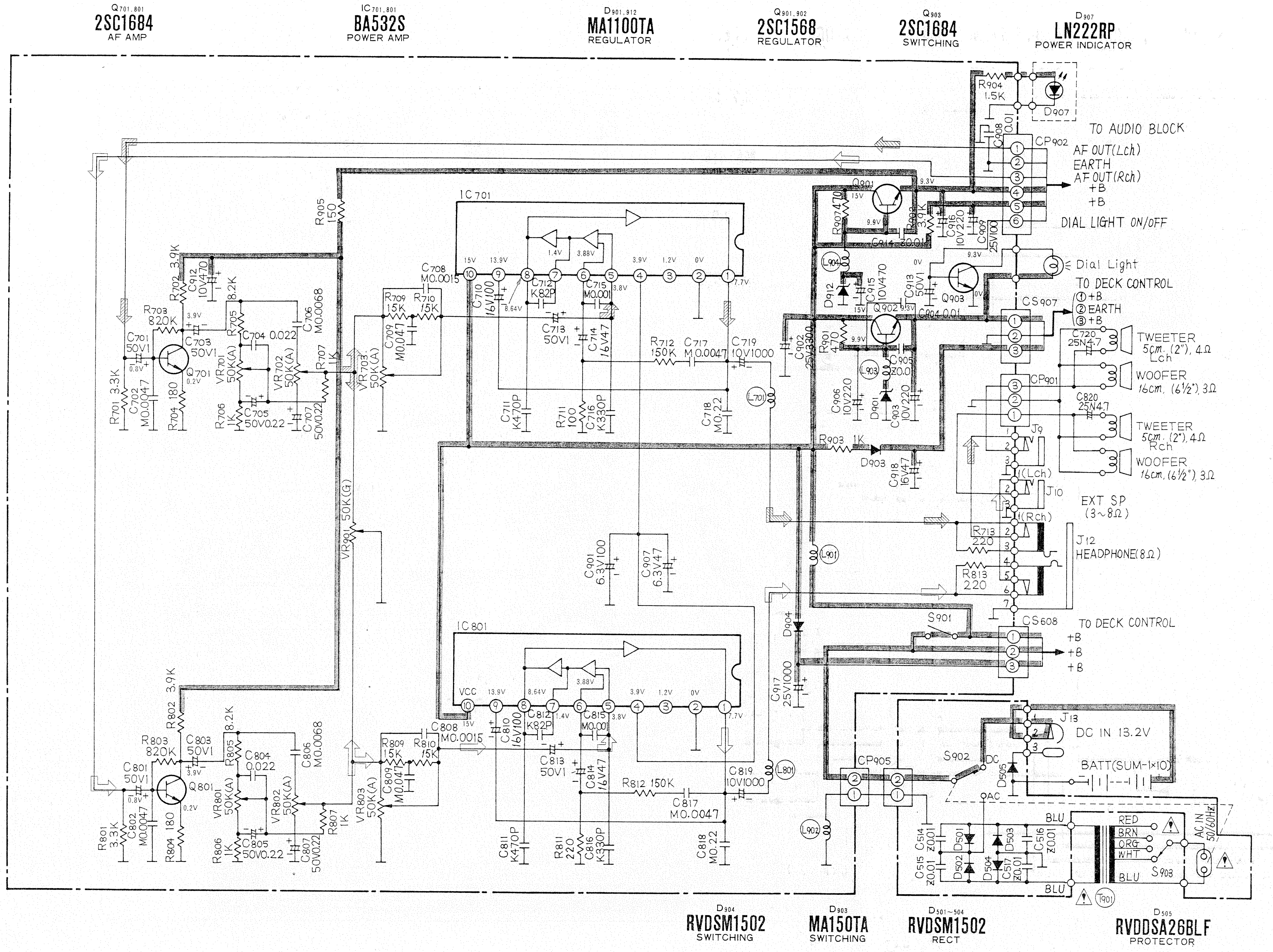
Q519

	Cue
VE	0V
VB	0.6V
VC	0.09V

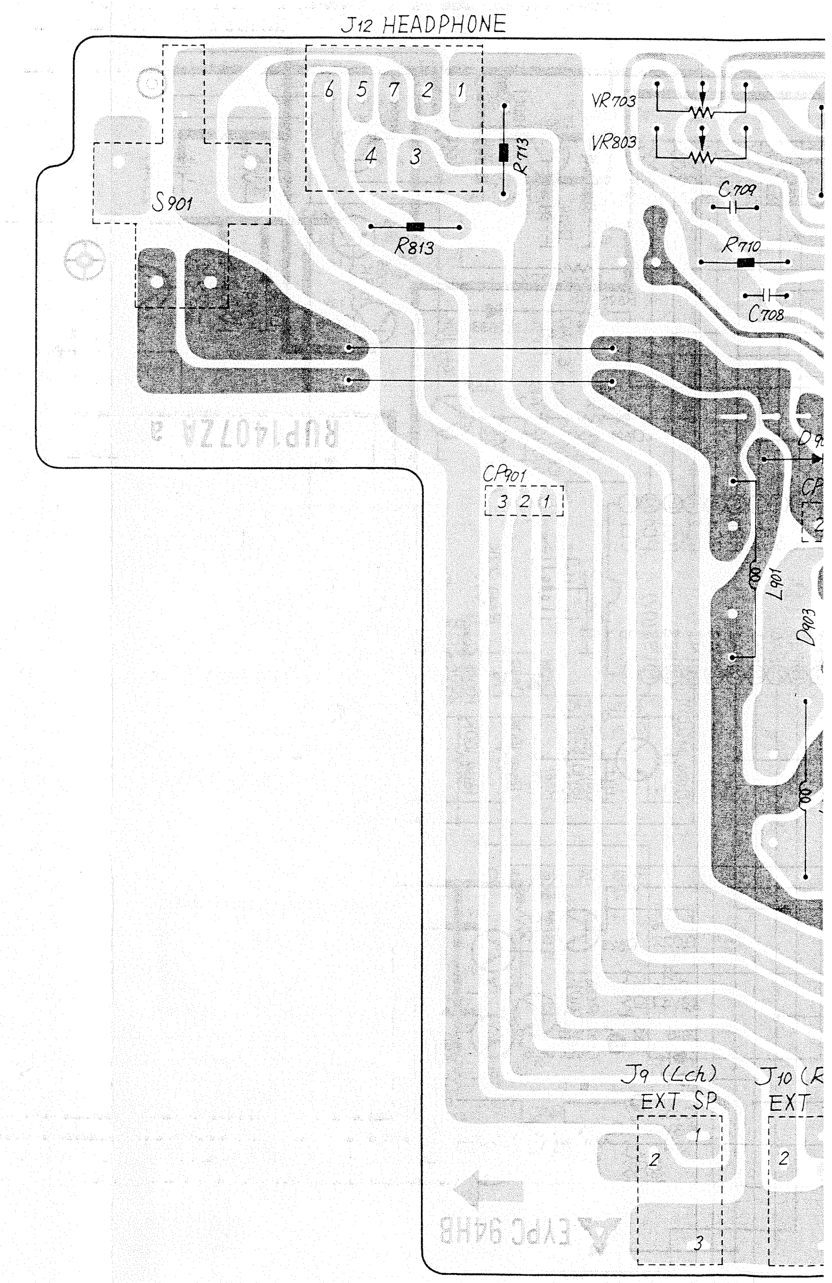
Q506

	Cue
VE	0V
VB	0.6V
VC	0.06V

SCHEMATIC DIAGRAM (POWER AMPLIFIER CIRCUIT) MODEL RX-7000F


Q701, 801
2SC1684
AF AMP
IC701, 801
BA532S
POWER AMP
D901, 912
MA1100TA
REGULATOR
Q901, 902
2SC1568
REGULATOR
Q903
2SC1684
SWITCHING
D907
LN222RP
POWER INDICATOR
TO AUDIO BLOCK
AF OUT(Lch)
EARTH
AF OUT(Rch)
+B
+B
DIAL LIGHT ON/OFF
Dial Light
TO DECK CONTROL
①+B
②EARTH
③+B
TWEETER 5cm (2"), 4Ω
WOOFER 16cm (6½"), 3Ω
Lch
Rch
EXT SP (3~8Ω)
HEADPHONE(8Ω)
TO DECK CONTROL
DC IN 13.2V
BATT(SUM-1×10)
AC IN 50/60Hz
D904
RVDSM1502
SWITCHING
D903
MA150TA
SWITCHING
D501~504
RVDSM1502
RECT
D505
RVDDSA26BLF
PROTECTOR

POWER AMPL

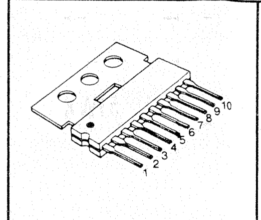

J12 HEADPHONE
S901
R813
R713
VR703
VR803
C709
R710
C708
CP901
RUP1407ZA
J9 (Lch) EXT SP
J10 EXT
EYPC 94HB

Notes:

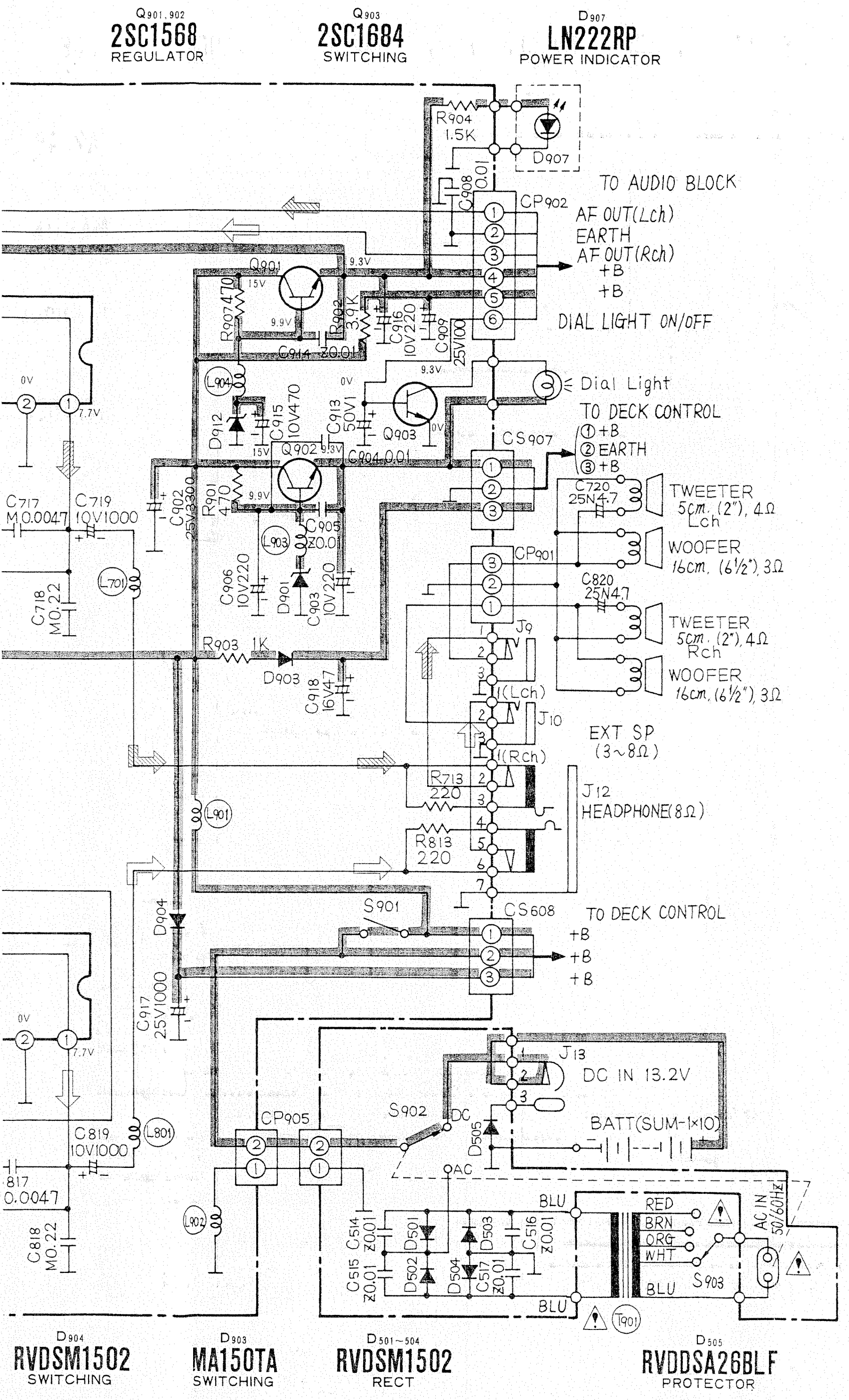
1. S901: Power switch in "OFF" position.
2. S902: AC/DC switch in "DC" position.
3. VR701,801: Bass control.
   VR702,802: Treble control.
   VR703,803: Volume control.
   VR901: Balance control.
4. DC voltage mesurements are taken with electronics voltmeter based on negative terminal of battery.
5. Battery current: No signal...................... 300mA

Maximum output (Radio) 1A
Maximum output (Tape)............ 1.6A

6. Important safety notice
   Components identified by ⚠ mark have special characteristics important for safety.
   When replacing any of these components, use only manufacturer's specified parts.


IC701,801

CUIT) MODEL RX-7000F

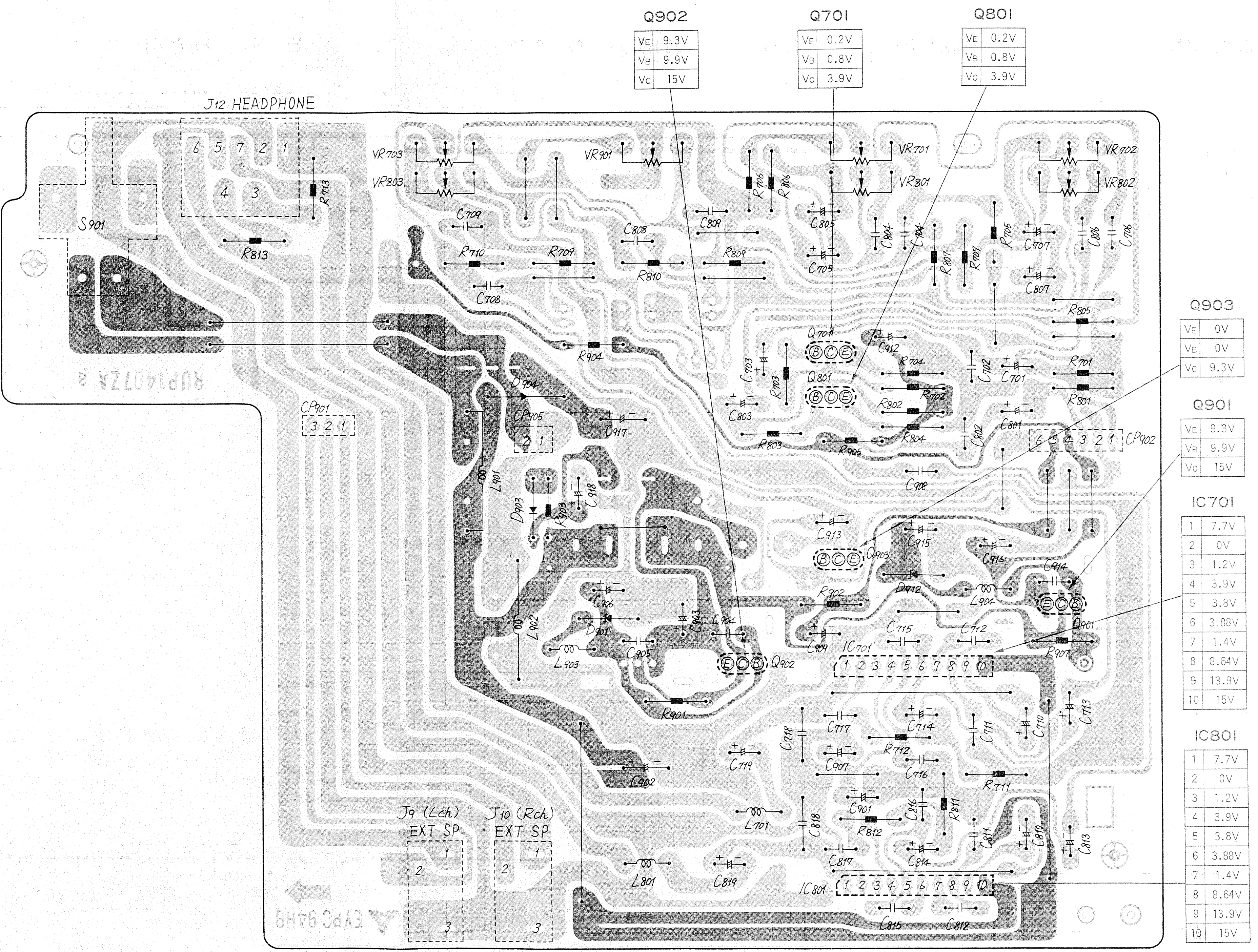

Q901, 902
2SC1568
REGULATOR
Q903
2SC1684
SWITCHING
D907
LN222RP
POWER INDICATOR
R904
1.5K
D907
C908
0.01
CP902
TO AUDIO BLOCK
① AF OUT(Lch)
② EARTH
③ AF OUT(Rch)
④ +B
⑤ +B
⑥ DIAL LIGHT ON/OFF
Q901
9.3V
15V
9.9V
R907 470
R902 3.9K
C916 10V220
C909 25V100
C914 Z0.01
9.3V
0V
Dial Light
TO DECK CONTROL
CS907
① +B
② EARTH
③ +B
L904
D912
C915 10V470
C913 50V1
Q903
0V
15V
Q902
9.3V
C904 0.01
9.9V
R901 470
C902 25V3300
C717 M0.0047
C719 10V1000
C718 M0.22
L701
0V
7.7V
L903
C905 Z0.01
C906 10V220
D901
C903 10V220
C720 25N4.7
TWEETER 5cm. (2"), 4Ω Lch
WOOFER 16cm. (6½"), 3Ω
CP901
C820 25N4.7
TWEETER 5cm. (2"), 4Ω Rch
WOOFER 16cm. (6½"), 3Ω
R903 1K
D903
C918 16V47
J9
1(Lch)
J10
1(Rch)
EXT SP (3~8Ω)
R713 220
R813 220
J12 HEADPHONE(8Ω)
L901
S901
CS608
TO DECK CONTROL
+B
+B
+B
D904
C917 25V1000
0V
7.7V
C819 10V1000
L801
817 0.0047
C818 M0.22
CP905
L902
S902
DC
AC
D505
J13
DC IN 13.2V
BATT(SUM-1×10)
BLU
C514 Z0.01
C515 Z0.01
D501
D502
D503
D504
C516 Z0.01
C517 Z0.01
RED
BRN
ORG
WHT
BLU
S903
AC IN 50/60Hz
BLU
T901
D904
RVDSM1502
SWITCHING
D903
MA150TA
SWITCHING
D501~504
RVDSM1502
RECT
D505
RVDDSA26BLF
PROTECTOR

um output (Radio)............1A
um output (Tape)............1.6A

mark have special characteristics

components, use only manufacturer's

POWER AMPLIFIER CIRCUIT BOARD


J12 HEADPHONE
6 5 7 2 1
4 3
R713
S901
R813
VR703
VR803
VR901
R706
R806
VR701
VR801
VR702
VR802
C709
C809
C808
R710
R709
R810
R809
C708
C805
C705
C804
C704
R807
R707
R705
C707
C806
C706
C807
R805
Q701
Q801
C712
R704
C703
R703
C702
C701
R701
R801
R802
R702
C803
R803
R905
R804
C802
C801
CP902
6 5 4 3 2 1
CP901
3 2 1
CP905
2 1
R904
D904
C917
L901
D903
R903
C918
C908
C913
Q903
C915
C916
C914
R902
D912
L904
Q901
R907
C906
D901
C903
C904
C905
Q902
L903
L902
C909
C715
IC701
1 2 3 4 5 6 7 8 9 10
R901
C718
C717
C714
C711
C710
C713
C719
C907
R712
C716
R711
C902
J9 (Lch) EXT SP
J10 (Rch) EXT SP
1 2 3
L701
C818
C901
C816
R811
R812
C811
C810
C813
L801
C819
C817
C814
IC801
1 2 3 4 5 6 7 8 9 10
C815
C812

Q902

V_E	9.3V
V_B	9.9V
V_C	15V

Q701

V_E	0.2V
V_B	0.8V
V_C	3.9V

Q801

V_E	0.2V
V_B	0.8V
V_C	3.9V

Q903

V_E	0V
V_B	0V
V_C	9.3V

Q901

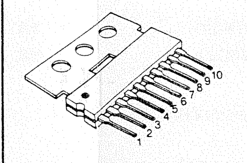
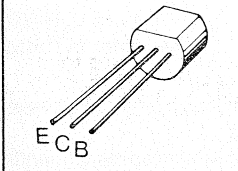
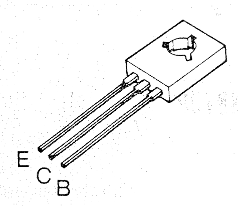
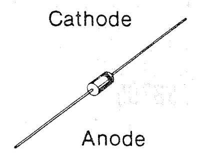
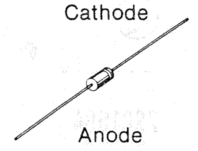
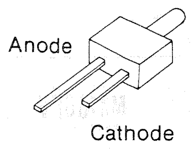
V_E	9.3V
V_B	9.9V
V_C	15V

IC701

1	7.7V
2	0V
3	1.2V
4	3.9V
5	3.8V
6	3.88V
7	1.4V
8	8.64V
9	13.9V
10	15V

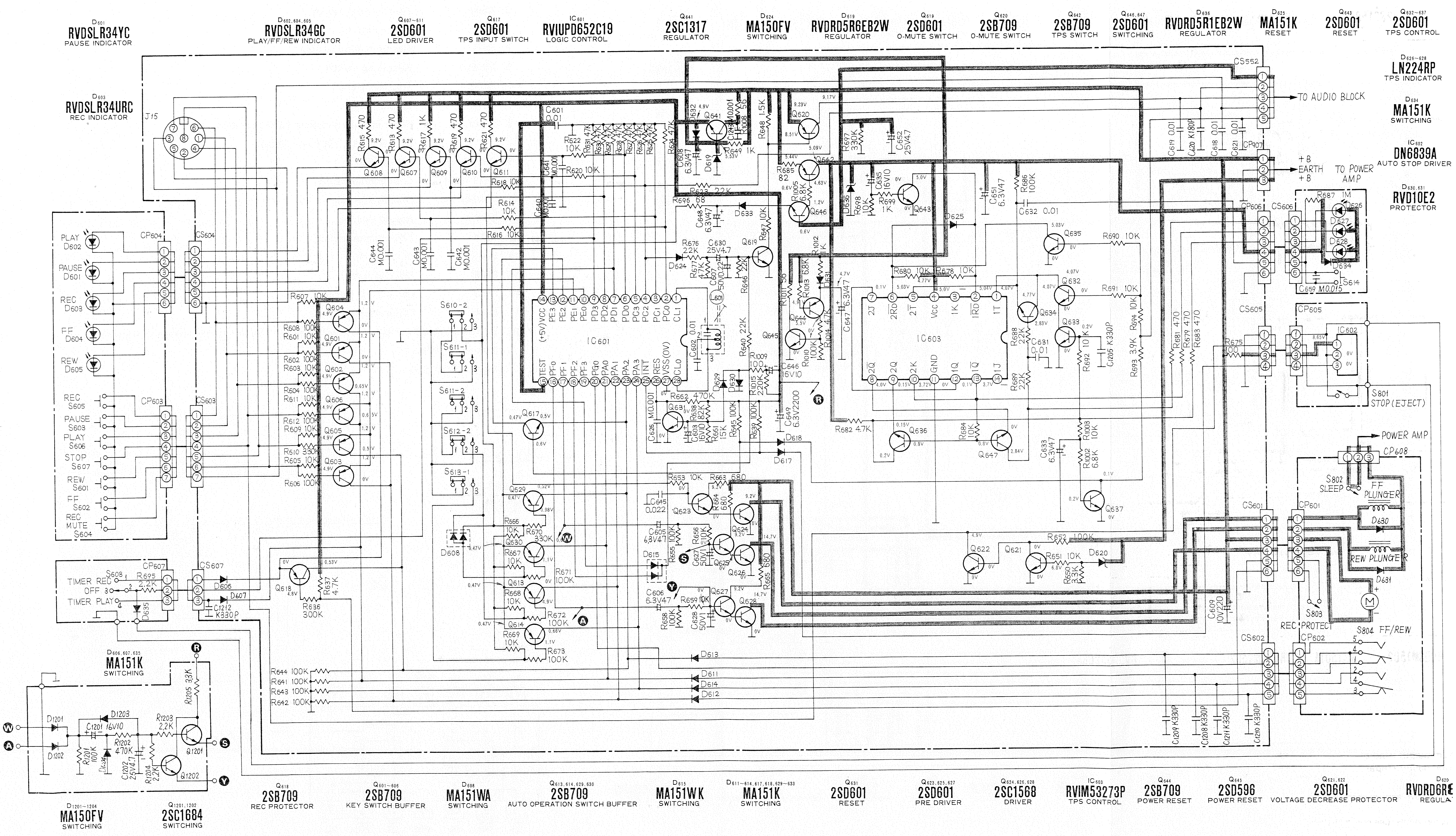
IC801

1	7.7V
2	0V
3	1.2V
4	3.9V
5	3.8V
6	3.88V
7	1.4V
8	8.64V
9	13.9V
10	15V

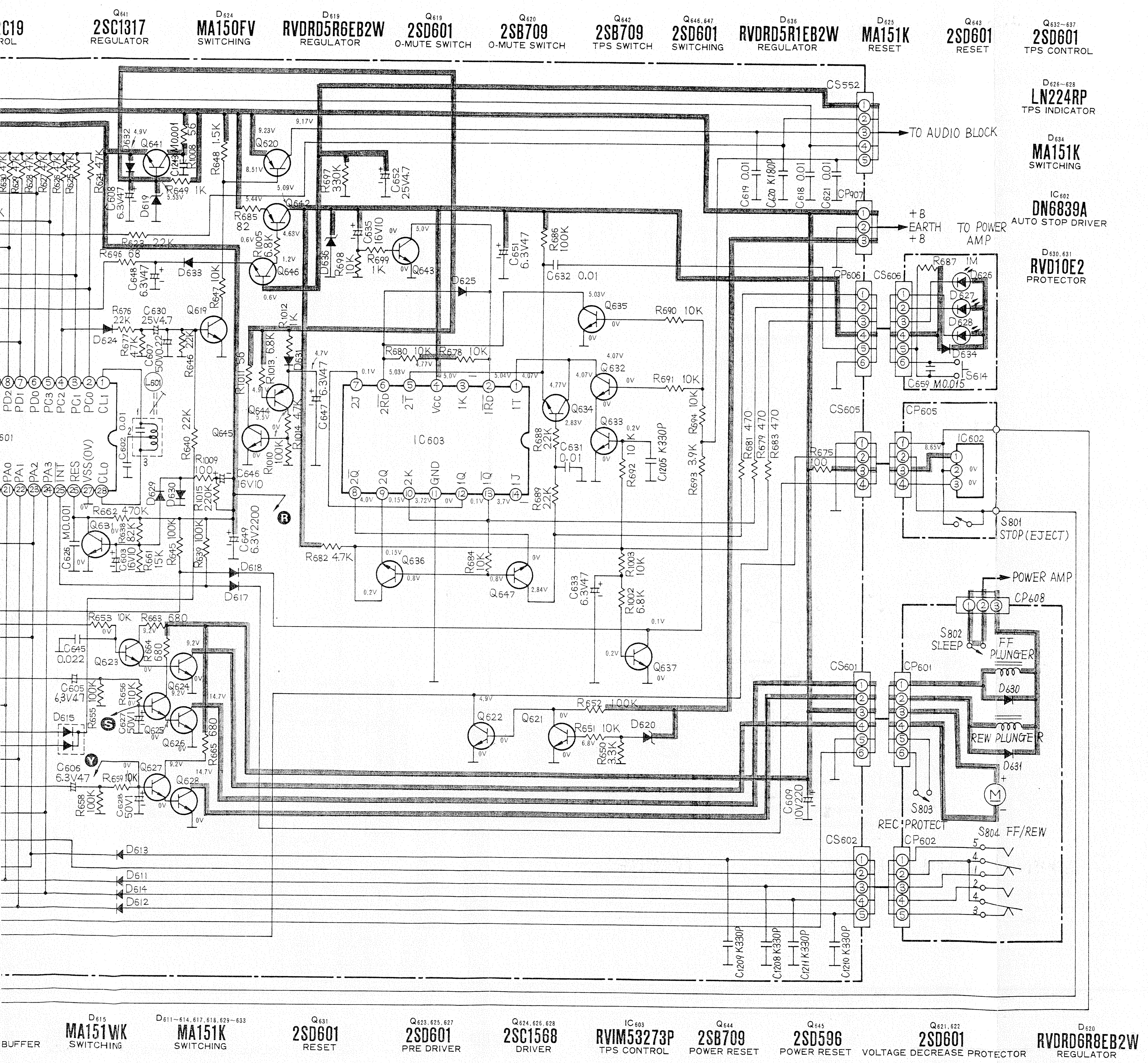
					
IC701,801	Q701,801,903	Q901,902	D501~504,901,903,904,912	D505	D907

1 2 3 4 5 6 7 8 9 10
E C B
E C B
Cathode
Anode
Cathode
Anode
Anode
Cathode

SCHEMATIC DIAGRAM (CONTROL CIRCUIT) MODEL RX-7000F

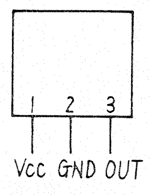

D601 RVDSLR34YC PAUSE INDICATOR
D602, 604, 605 RVDSLR34GC PLAY/FF/REW INDICATOR
Q607~611 2SD601 LED DRIVER
Q617 2SD601 TPS INPUT SWITCH
IC601 RVIUPD652C19 LOGIC CONTROL
Q641 2SC1317 REGULATOR
D624 MA150FV SWITCHING
D619 RVDRD5R6EB2W REGULATOR
Q619 2SD601 O-MUTE SWITCH
Q620 2SB709 O-MUTE SWITCH
Q642 2SB709 TPS SWITCH
Q646, 647 2SD601 SWITCHING
D636 RVDRD5R1EB2W REGULATOR
D625 MA151K RESET
Q643 2SD601 RESET
Q632~637 2SD601 TPS CONTROL
D626~628 LN224RP TPS INDICATOR
D634 MA151K SWITCHING
IC602 DN6839A AUTO STOP DRIVER
D630, 631 RVD10E2 PROTECTOR
D603 RVDSLR34URC REC INDICATOR
J15
CS552
TO AUDIO BLOCK
+B
EARTH
+B
TO POWER AMP
CP606
CS606
CS604
CP604
PLAY D602
PAUSE D601
REC D603
FF D604
REW D605
CP603
CS603
REC S605
PAUSE S603
PLAY S606
STOP S607
REW S601
FF S602
REC MUTE S604
IC601
IC603
CS605
CP605
IC602
S801 STOP (EJECT)
POWER AMP
CP608
S802 SLEEP
FF PLUNGER
D630
REW PLUNGER
D631
CS601
CP601
S803 REC PROTECT
CS602
CP602
S804 FF/REW
CP607
CS607
TIMER REC
OFF
TIMER PLAY
S608
D605
D607
D635
D608
D615
D617
D618
D613
D611
D614
D612
D620
S610-2
S611-1
S611-2
S612-2
S613-1
D606, 607, 635 MA151K SWITCHING
D1201
D1202
D1203
Q1201
Q1202
D1201~1204 MA150FV SWITCHING
Q1201, 1202 2SC1684 SWITCHING
Q618 2SB709 REC PROTECTOR
Q601~606 2SB709 KEY SWITCH BUFFER
D608 MA151WA SWITCHING
Q613, 614, 629, 630 2SB709 AUTO OPERATION SWITCH BUFFER
D615 MA151WK SWITCHING
D611~614, 617, 618, 629~633 MA151K SWITCHING
Q631 2SD601 RESET
Q623, 625, 627 2SD601 PRE DRIVER
Q624, 626, 628 2SC1568 DRIVER
IC603 RVIM53273P TPS CONTROL
Q644 2SB709 POWER RESET
Q645 2SD596 POWER RESET
Q621, 622 2SD601 VOLTAGE DECREASE PROTECTOR
D620 RVDRD6R
REGULA

AM (CONTROL CIRCUIT) MODEL RX-7000F

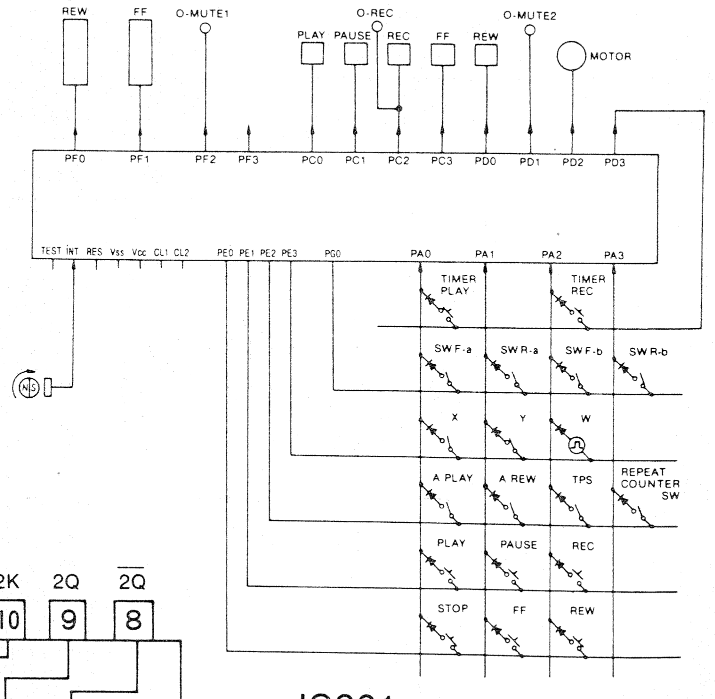

C19
ROL
Q641 2SC1317 REGULATOR
D624 MA150FV SWITCHING
D619 RVDRD5R6EB2W REGULATOR
Q619 2SD601 O-MUTE SWITCH
Q620 2SB709 O-MUTE SWITCH
Q642 2SB709 TPS SWITCH
Q646, 647 2SD601 SWITCHING
D636 RVDRD5R1EB2W REGULATOR
D625 MA151K RESET
Q643 2SD601 RESET
Q632~637 2SD601 TPS CONTROL
D626~628 LN224RP TPS INDICATOR
D634 MA151K SWITCHING
IC602 DN6839A AUTO STOP DRIVER
D630, 631 RVD10E2 PROTECTOR
CS552
TO AUDIO BLOCK
+B
EARTH
+B
TO POWER AMP
CP607
CP606
CS606
CS605
CP605
IC603
IC602
S801 STOP (EJECT)
POWER AMP
CP608
S802 SLEEP
FF PLUNGER
REW PLUNGER
CS601
CP601
S803 REC PROTECT
S804 FF/REW
CS602
CP602
BUFFER
D615 MA151WK SWITCHING
D611~614, 617, 618, 629~633 MA151K SWITCHING
Q631 2SD601 RESET
Q623, 625, 627 2SD601 PRE DRIVER
Q624, 626, 628 2SC1568 DRIVER
IC603 RVIM53273P TPS CONTROL
Q644 2SB709 POWER RESET
Q645 2SD596 POWER RESET
Q621, 622 2SD601 VOLTAGE DECREASE PROTECTOR
D620 RVDRD6R8EB2W REGULATOR

Notes:

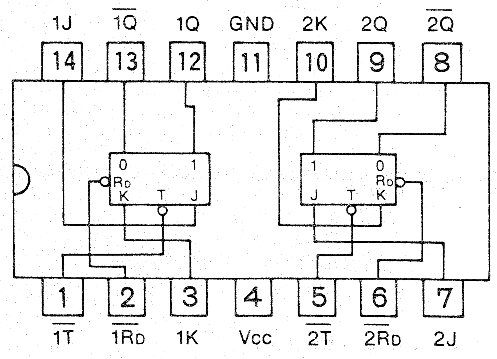
1. S601: Rewind switch.
2. S602: Fast forward switch.
3. S603: Pause switch.
4. S604: Record muting switch.
5. S605: Recording switch.
6. S606: Playback switch.
7. S607: Stop switch.
8. S608: Timer standby switch in "OFF" position.
   (1 ... REC, 3 ... OFF, 4 ... PLAY)
9. S610-2: OFF switch.
10. S611-1, S611-2: One program switch.
11. S612-2: One side switch.
12. S613-1: Repeat switch.
13. S614: TPS program switch.
14. S801: Stop switch.
15. S802: Sleep switch.
16. S803: Rec protect switch.
17. S804: FF/Rew switch.
18. DC voltage measurements are taken with electronics voltmeter based on negative terminal of battery.
    Tape ... Stop, LED ... OFF


1 2 3
Vcc GND OUT

IC602

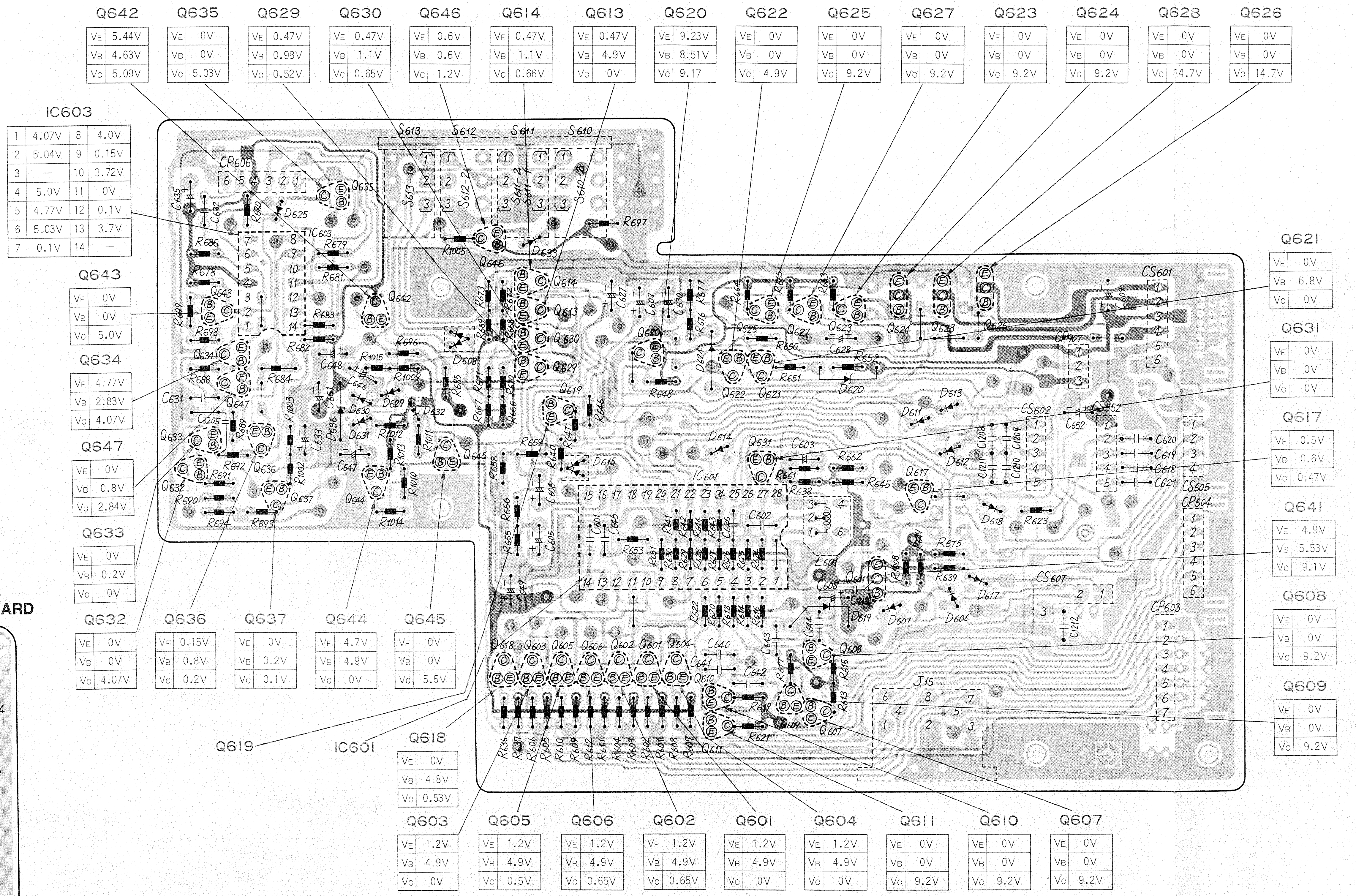

REW
FF
O-MUTE1
O-REC
O-MUTE2
PLAY
PAUSE
REC
FF
REW
MOTOR
PF0 PF1 PF2 PF3 PC0 PC1 PC2 PC3 PD0 PD1 PD2 PD3
TEST INT RES Vss Vcc CL1 CL2 PE0 PE1 PE2 PE3 PG0 PA0 PA1 PA2 PA3
TIMER PLAY
TIMER REC
SW F-a
SW R-a
SW F-b
SW R-b
X
Y
W
A PLAY
A REW
TPS
REPEAT COUNTER SW
PLAY
PAUSE
REC
STOP
FF
REW

IC601


1J 1Q̄ 1Q GND 2K 2Q 2Q̄
14 13 12 11 10 9 8
0 1
RD
K T J
1 0
RD
J T K
1 2 3 4 5 6 7
1T̄ 1R̄D 1K Vcc 2T̄ 2R̄D 2J

IC603

CONTROL CIRCUIT BOARD


S613
S612
S611
S610
CP606
CP601
CP602
CP603
CP604
CP605
CP607
CS601
CS602
CS605
CS607
IC601
IC603
J15
L601
R697
R1005
D625
D633
D608
Q646
Q614
Q613
Q630
Q629
Q642
Q643
Q634
Q647
Q633
Q632
Q636
Q637
Q644
Q645
Q619
Q618
Q620
Q625
Q627
Q623
Q624
Q628
Q626
Q622
Q621
Q631
Q617
Q641
Q608
Q609
Q607
Q610
Q611
Q601
Q602
Q603
Q604
Q605
Q606

	Q642	Q635	Q629	Q630	Q646	Q614	Q613	Q620	Q622	Q625	Q627	Q623	Q624	Q628	Q626
VE	5.44V	0V	0.47V	0.47V	0.6V	0.47V	0.47V	9.23V	0V	0V	0V	0V	0V	0V	0V
VB	4.63V	0V	0.98V	1.1V	0.6V	1.1V	4.9V	8.51V	0V	0V	0V	0V	0V	0V	0V
VC	5.09V	5.03V	0.52V	0.65V	1.2V	0.66V	0V	9.17	4.9V	9.2V	9.2V	9.2V	9.2V	14.7V	14.7V

IC603

1	4.07V	8	4.0V
2	5.04V	9	0.15V
3	—	10	3.72V
4	5.0V	11	0V
5	4.77V	12	0.1V
6	5.03V	13	3.7V
7	0.1V	14	—

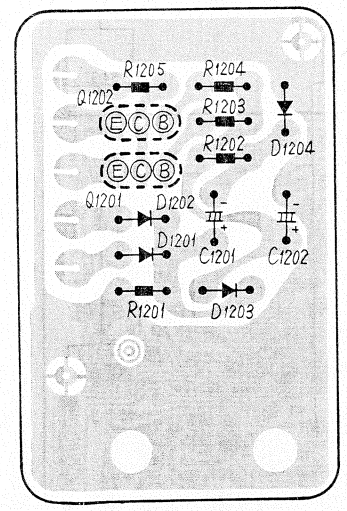
	Q643	Q634	Q647	Q633	Q621	Q631	Q617	Q641	Q608	Q609
VE	0V	4.77V	0V	0V	0V	0V	0.5V	4.9V	0V	0V
VB	0V	2.83V	0.8V	0.2V	6.8V	0V	0.6V	5.53V	0V	0V
VC	5.0V	4.07V	2.84V	0V	0V	0V	0.47V	9.1V	9.2V	9.2V

	Q632	Q636	Q637	Q644	Q645	Q618
VE	0V	0.15V	0V	4.7V	0V	0V
VB	0V	0.8V	0.2V	4.9V	0V	4.8V
VC	4.07V	0.2V	0.1V	0V	5.5V	0.53V

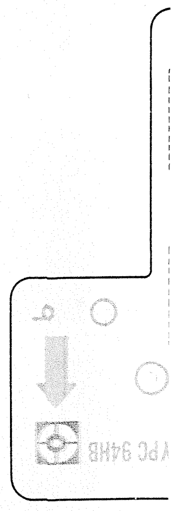
Q619 IC601

	Q603	Q605	Q606	Q602	Q601	Q604	Q611	Q610	Q607
VE	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V	0V	0V	0V
VB	4.9V	4.9V	4.9V	4.9V	4.9V	4.9V	0V	0V	0V
VC	0V	0.5V	0.65V	0.65V	0V	0V	9.2V	9.2V	9.2V

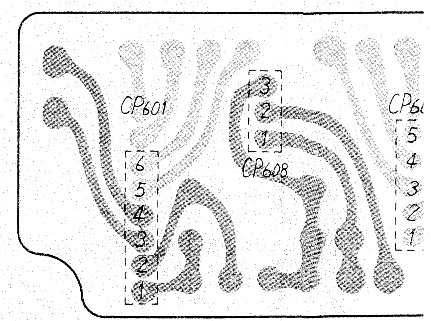
■ SWITCHING CIRCUIT BOARD


R1205
R1204
R1203
R1202
Q1202
D1204
Q1201
D1202
D1201
C1201
C1202
R1201
D1203

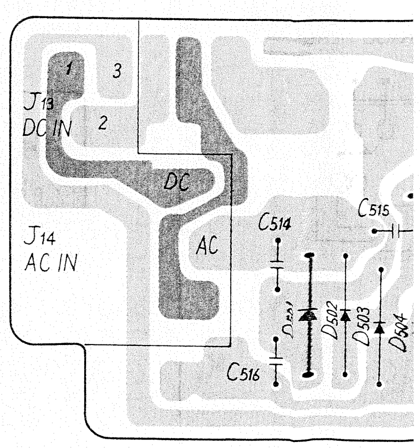
■ SWITCH C

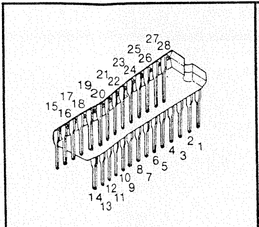


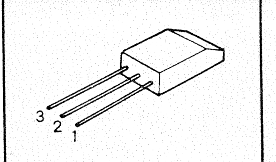
■ MOTOR CIRCUIT BOARD


CP601
CP608

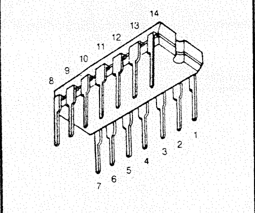
■ POWER CIRCUIT BOARD

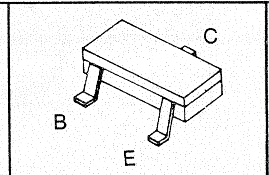

J13 DC IN
J14 AC IN
DC
AC
C514
C515
C516
D512
D503
D504


IC601

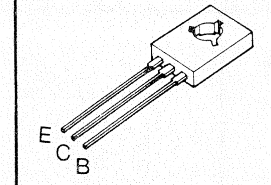


IC602

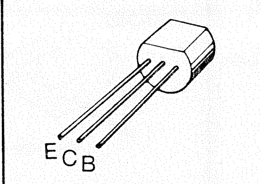

IC603



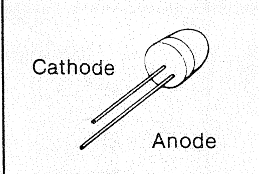
Q601~611,613,614, 617~623,625,627, 629~637,642~647

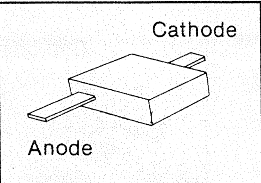


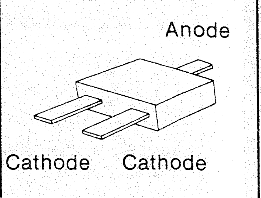
Q624,626,628

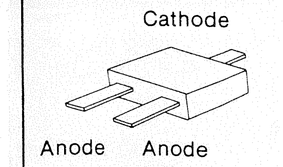


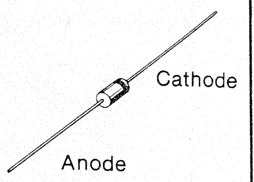
Q641

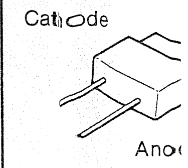

Cathode
Anode
D601~605


Cathode
Anode
D606,607,611~614, 617,618,625, 629~635


Anode
Cathode
Cathode
D608

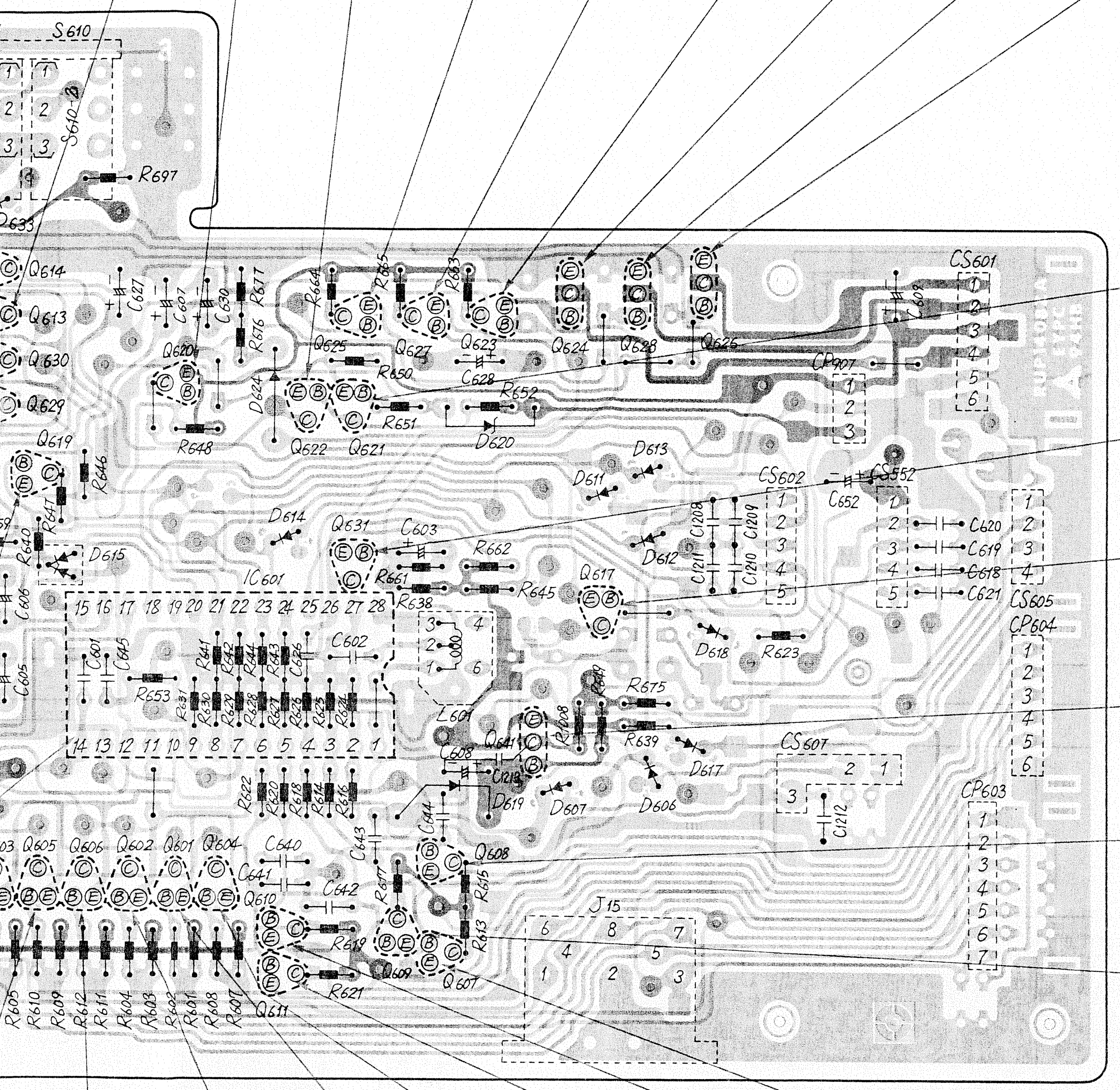

Cathode
Anode
Anode
D615


Cathode
Anode
D619,620, 624,636


Cathode
Ano
D626~628

CONTROL CIRCUIT BOARD

	Q613	Q620	Q622	Q625	Q627	Q623	Q624	Q628	Q626
VE	0.47V	9.23V	0V	0V	0V	0V	0V	0V	0V
VB	4.9V	8.51V	0V	0V	0V	0V	0V	0V	0V
VC	0V	9.17	4.9V	9.2V	9.2V	9.2V	9.2V	14.7V	14.7V


S610
S610-②
R697
Q614
Q613
Q630
Q629
Q619
C627
C607
C630
R617
R616
Q620
D624
R664
R665
R633
Q625
Q627
Q623
Q624
Q628
Q626
R650
C628
R652
R651
D620
R648
Q622
Q621
CS601
CP907
D613
D611
CS602
C652
C552
D614
Q631
C603
R662
R661
R645
Q617
D612
C1211
C1208
C1209
C1210
C620
C619
C618
C621
CS605
CP604
IC601
R638
C602
C601
C645
R653
L601
D618
R623
R675
R639
D617
CS607
C1212
D606
D607
D619
Q641
Q618
R622
CP603
C644
C643
C640
C641
C642
Q608
Q610
R615
R643
R642
R621
Q609
Q607
Q611
J15
Q605
Q606
Q602
Q601
Q604
R605
R609
R612
R611
R604
R603
R602
R608
R607

	Q621
VE	0V
VB	6.8V
VC	0V

	Q631
VE	0V
VB	0V
VC	0V

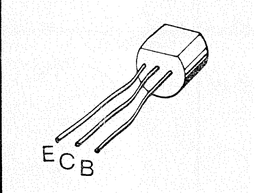
	Q617
VE	0.5V
VB	0.6V
VC	0.47V

	Q641
VE	4.9V
VB	5.53V
VC	9.1V

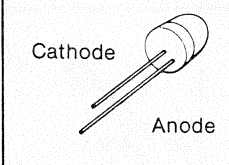
	Q608
VE	0V
VB	0V
VC	9.2V

	Q609
VE	0V
VB	0V
VC	9.2V

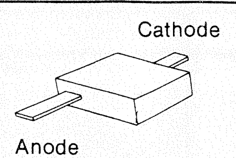
	Q606	Q602	Q601	Q604	Q611	Q610	Q607
VE	1.2V	1.2V	1.2V	1.2V	0V	0V	0V
VB	4.9V	4.9V	4.9V	4.9V	0V	0V	0V
VC	0.65V	0.65V	0V	0V	9.2V	9.2V	9.2V



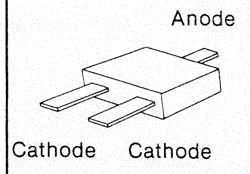
Q641


Cathode
Anode

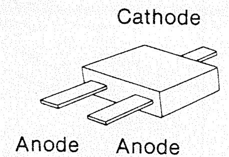
D601~605


Cathode
Anode

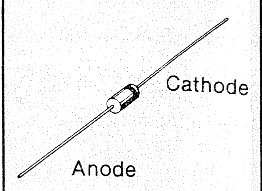
D606,607,611~614,
617,618,625,
629~635


Anode
Cathode
Cathode

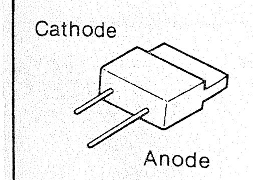
D608


Cathode
Anode
Anode

D615

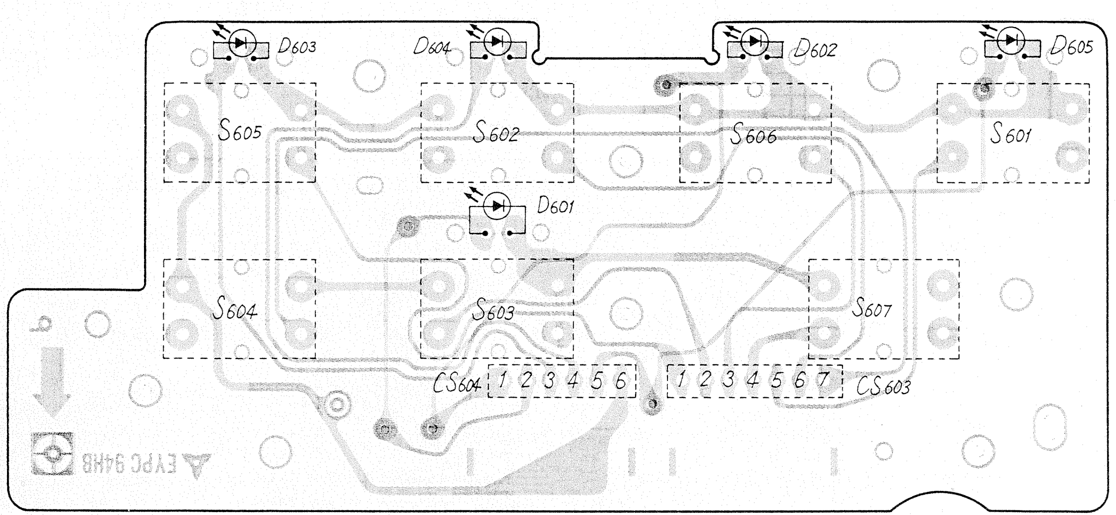

Cathode
Anode

D619,620,
624,636

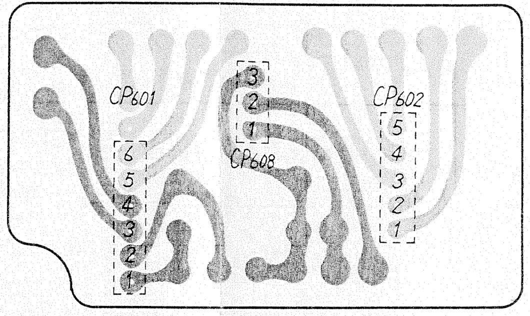

Cathode
Anode

D626~628

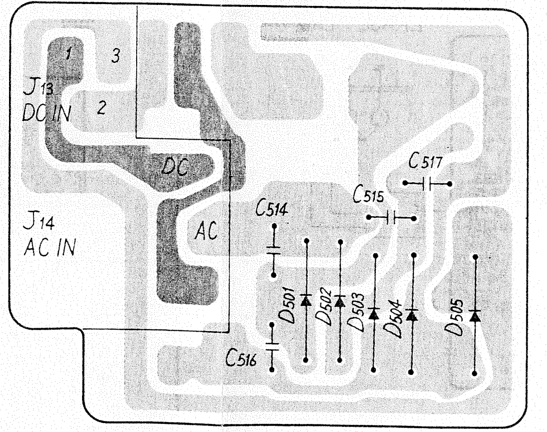
■ SWITCH CIRCUIT BOARD


D603
D604
D602
D605
S605
S602
S606
S601
D601
S604
S603
S607
CS604
1 2 3 4 5 6
1 2 3 4 5 6 7
CS603
EYPC 94HB

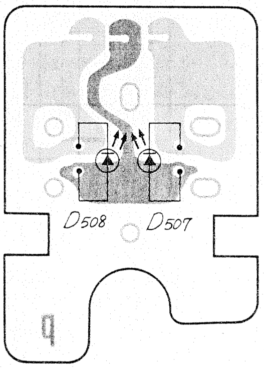
■ MOTOR CIRCUIT BOARD


CP601
CP602
CP608
6
5
4
3
2
1

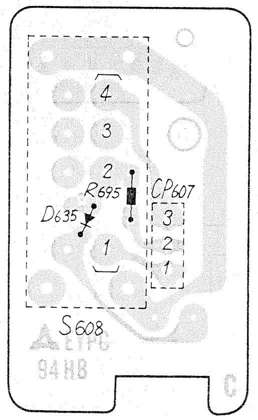
■ POWER CIRCUIT BOARD


J13
DC IN
J14
AC IN
DC
AC
C514
C515
C517
C516
D501
D502
D503
D504
D505

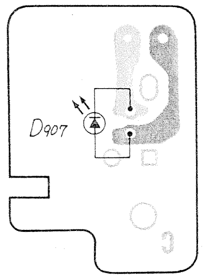
■ LED CIRCUIT BOARD



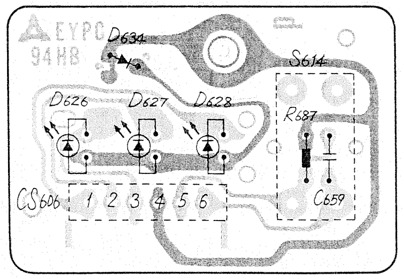
■ TIMER CIRCUIT BOARD


4
3
2
1
R695
CP607
D635
S608
EYPC
94HB

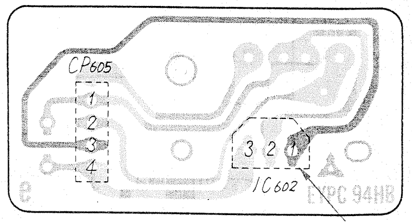
■ LED CIRCUIT BOARD



■ LED CIRCUIT BOARD


EYPC
94HB
D634
S614
D626
D627
D628
R687
CS606
1 2 3 4 5 6
C659

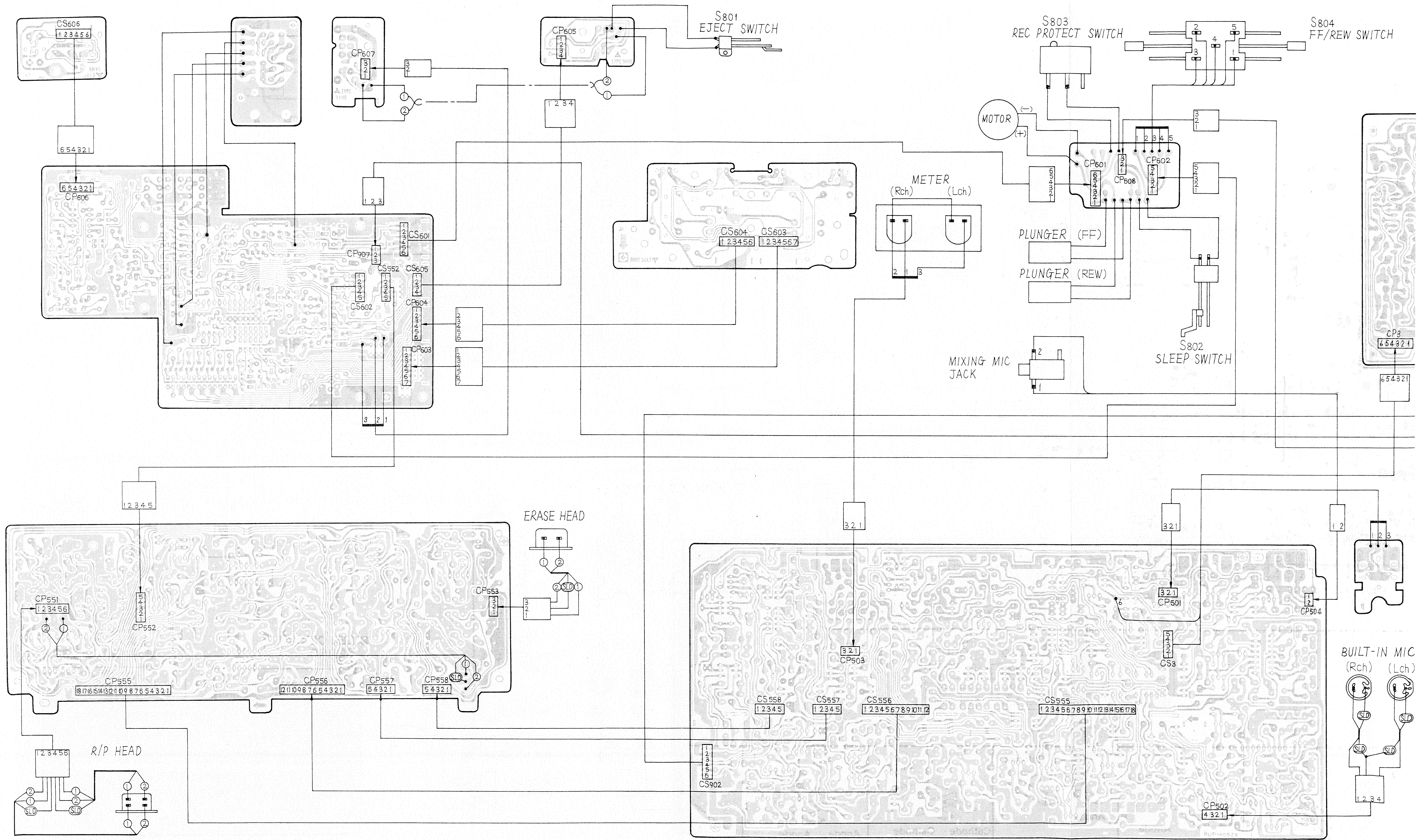
■ IC CIRCUIT BOARD


CP605
1
2
3
4
3 2 1
IC602
EYPC 94HB

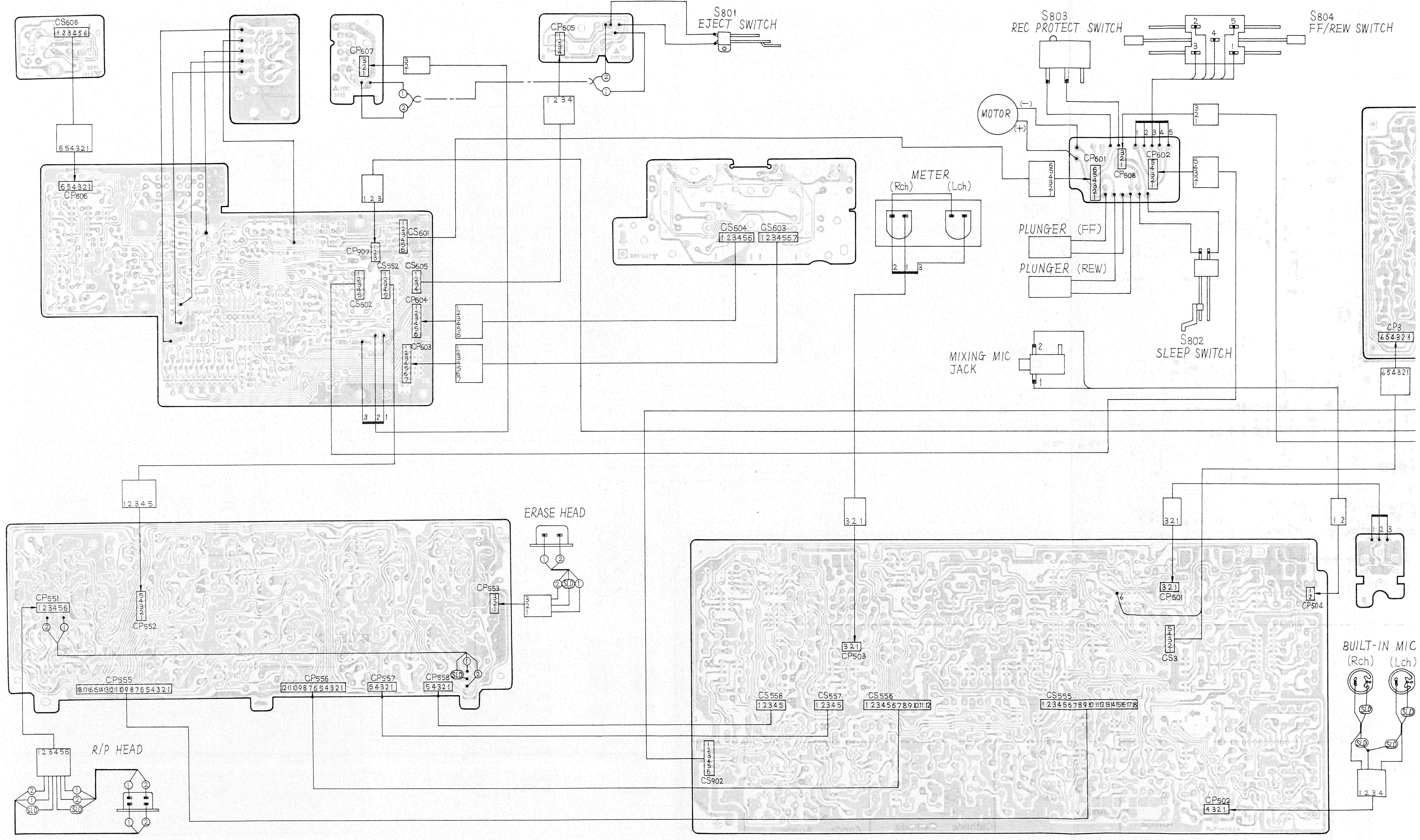
IC602

1	8.65V
2	0V
3	0V

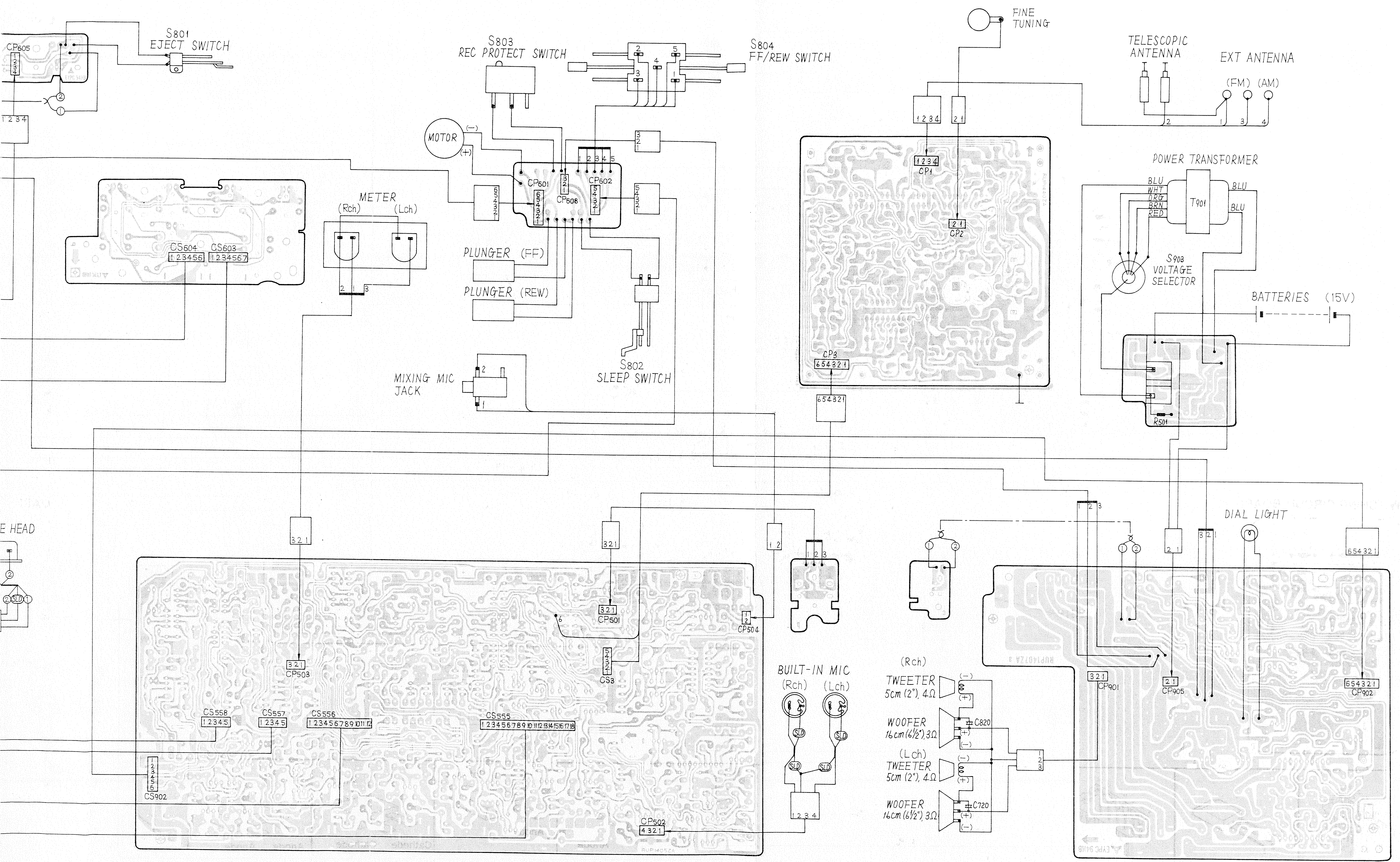
WIRING CONNECTION DIAGRAM MODEL RX-7000F


CS606
123456
654321
654321
CP606
CP607
321
321
CP605
1234
1234
S801
EJECT SWITCH
S803
REC PROTECT SWITCH
S804
FF/REW SWITCH
MOTOR
(−)
(+)
CP601
CP608
CP602
12345
METER
(Rch)
(Lch)
CS604
123456
CS603
1234567
CS601
CP907
123
CS552
CS605
CS602
CP604
CP603
PLUNGER (FF)
PLUNGER (REW)
MIXING MIC JACK
S802
SLEEP SWITCH
CP3
654321
12345
ERASE HEAD
CP551
123456
CP552
CP553
CP555
CP556
CP557
54321
CP558
54321
R/P HEAD
SLD
CS558
12345
CS557
12345
CS556
CS555
CS902
CP503
321
CP501
321
CS3
CP504
BUILT-IN MIC
(Rch)
(Lch)
CP502
4321
1234

WIRING CONNECTION DIAGRAM MODEL RX-7000F


CS606
654321
CP606
CP607
CP605
S801
EJECT SWITCH
S803
REC PROTECT SWITCH
S804
FF/REW SWITCH
MOTOR
(−)
(+)
CP601
CP608
CP602
METER
(Rch)
(Lch)
PLUNGER (FF)
PLUNGER (REW)
S802
SLEEP SWITCH
MIXING MIC
JACK
CS601
CP907
CS552
CS605
CS602
CP604
CP603
CS604
CS603
CP3
ERASE HEAD
SLD
CP551
CP552
CP553
CP555
CP556
CP557
CP558
R/P HEAD
CS558
CS557
CS556
CS555
CS902
CP503
CP501
CP504
CS3
BUILT-IN MIC
(Rch)
(Lch)
CP502

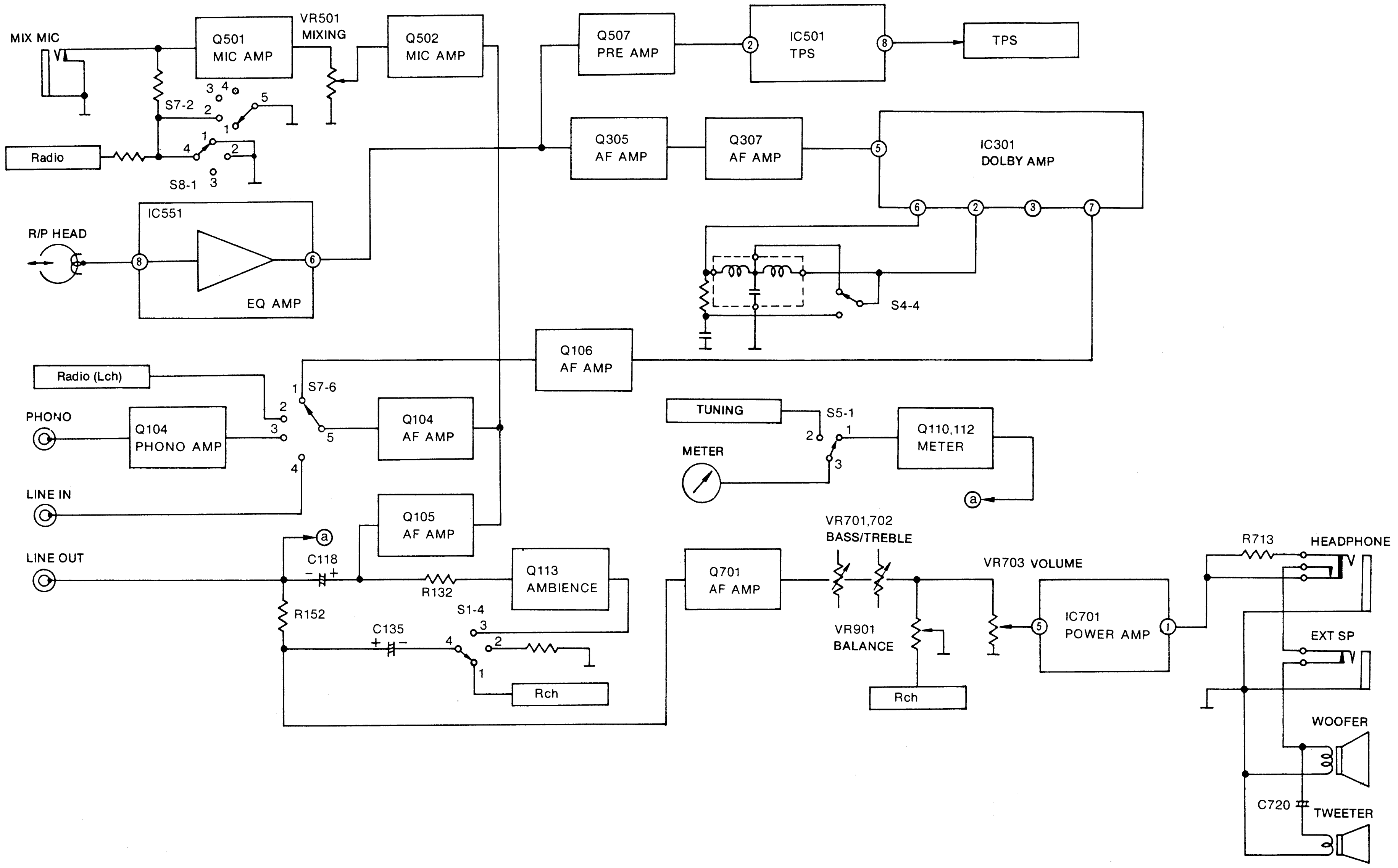
WIRING CONNECTION DIAGRAM MODEL RX-7000F


S801
EJECT SWITCH
CP605
S803
REC PROTECT SWITCH
S804
FF/REW SWITCH
FINE TUNING
TELESCOPIC ANTENNA
EXT ANTENNA
(FM) (AM)
MOTOR
(−)
(+)
CP501
CP508
CP602
CP1
CP2
POWER TRANSFORMER
BLU
WHT
ORG
BRN
RED
T901
S903
VOLTAGE SELECTOR
METER
(Rch) (Lch)
CS604
CS603
PLUNGER (FF)
PLUNGER (REW)
S802
SLEEP SWITCH
MIXING MIC JACK
CP3
BATTERIES (15V)
R501
DIAL LIGHT
E HEAD
SLD
CP501
CP504
CP503
CS3
CS558
CS557
CS556
CS555
CS902
CP502
BUILT-IN MIC
(Rch) (Lch)
(Rch)
TWEETER 5cm (2"), 4Ω
WOOFER 16cm (6½"), 3Ω
C820
(Lch)
TWEETER 5cm (2"), 4Ω
WOOFER 16cm (6½"), 3Ω
C720
CP901
CP905
CP902

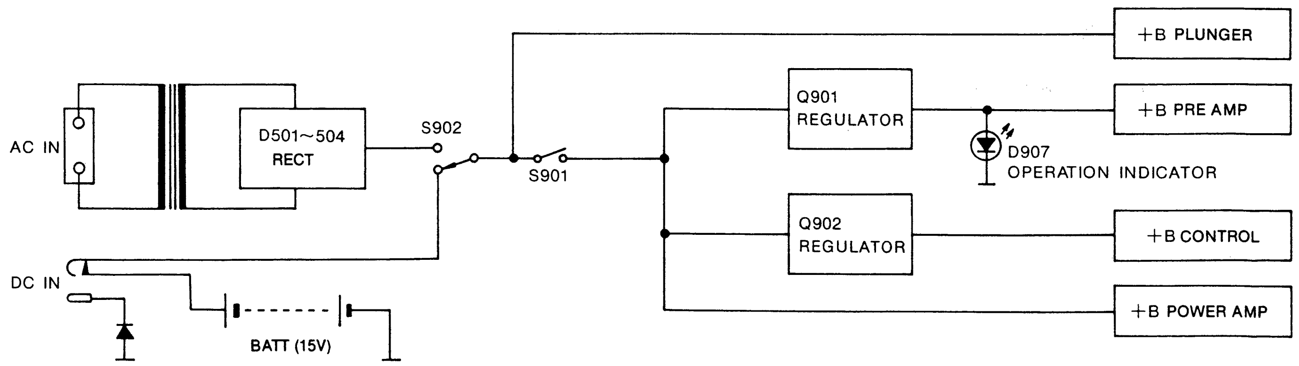
BLOCK DIAGRAM

AUDIO BLOCK

PLAYBACK (Lch)

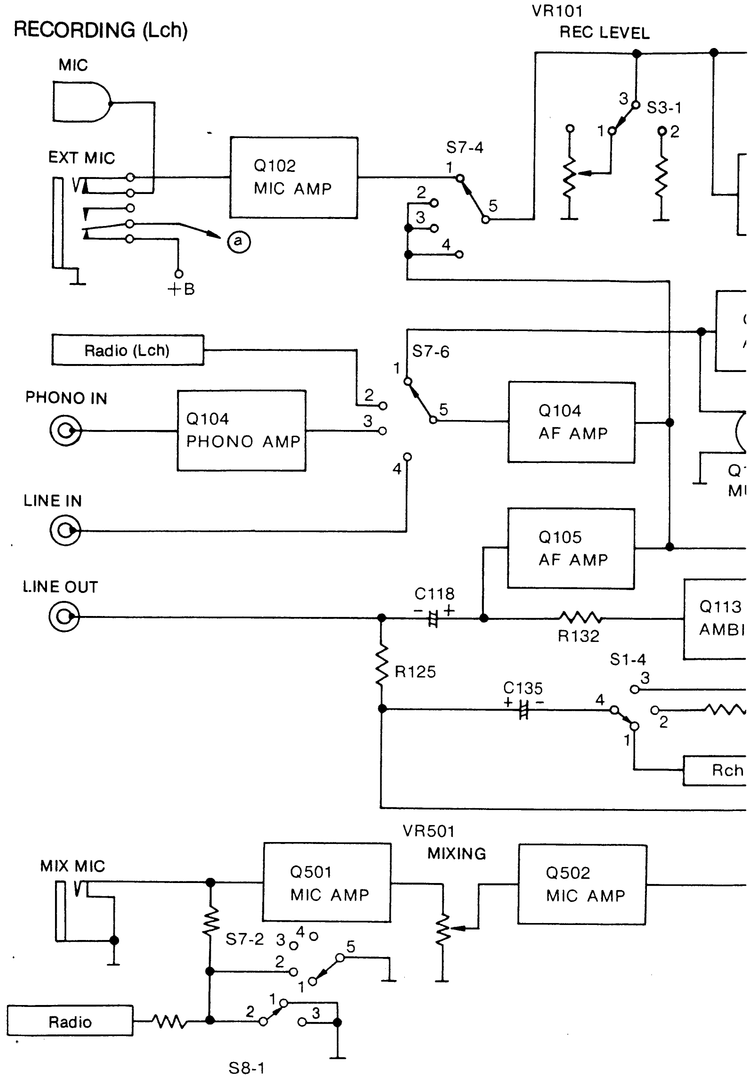

MIX MIC
Q501
MIC AMP
VR501
MIXING
Q502
MIC AMP
S7-2
Radio
S8-1
Q507
PRE AMP
IC501
TPS
TPS
Q305
AF AMP
Q307
AF AMP
IC301
DOLBY AMP
R/P HEAD
IC551
EQ AMP
S4-4
Q106
AF AMP
Radio (Lch)
S7-6
PHONO
Q104
PHONO AMP
Q104
AF AMP
LINE IN
Q105
AF AMP
LINE OUT
C118
R132
Q113
AMBIENCE
R152
C135
S1-4
Rch
TUNING
S5-1
METER
Q110,112
METER
Q701
AF AMP
VR701,702
BASS/TREBLE
VR901
BALANCE
Rch
VR703 VOLUME
IC701
POWER AMP
R713
HEADPHONE
EXT SP
WOOFER
C720
TWEETER

POWER SOURCE


AC IN
D501~504
RECT
S902
S901
DC IN
BATT (15V)
Q901
REGULATOR
Q902
REGULATOR
D907
OPERATION INDICATOR
+B PLUNGER
+B PRE AMP
+B CONTROL
+B POWER AMP

AUDIO BLOCK

RECORDING (Lch)


VR101
REC LEVEL
MIC
EXT MIC
Q102
MIC AMP
S7-4
S3-1
+B
Radio (Lch)
S7-6
PHONO IN
Q104
PHONO AMP
Q104
AF AMP
LINE IN
Q105
AF AMP
LINE OUT
C118
R132
Q113
R125
C135
S1-4
Rch
VR501
MIXING
MIX MIC
Q501
MIC AMP
Q502
MIC AMP
S7-2
Radio
S8-1

RADIO BLOCK

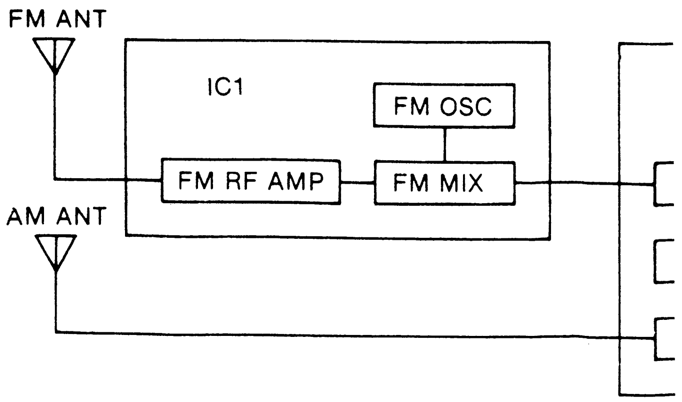
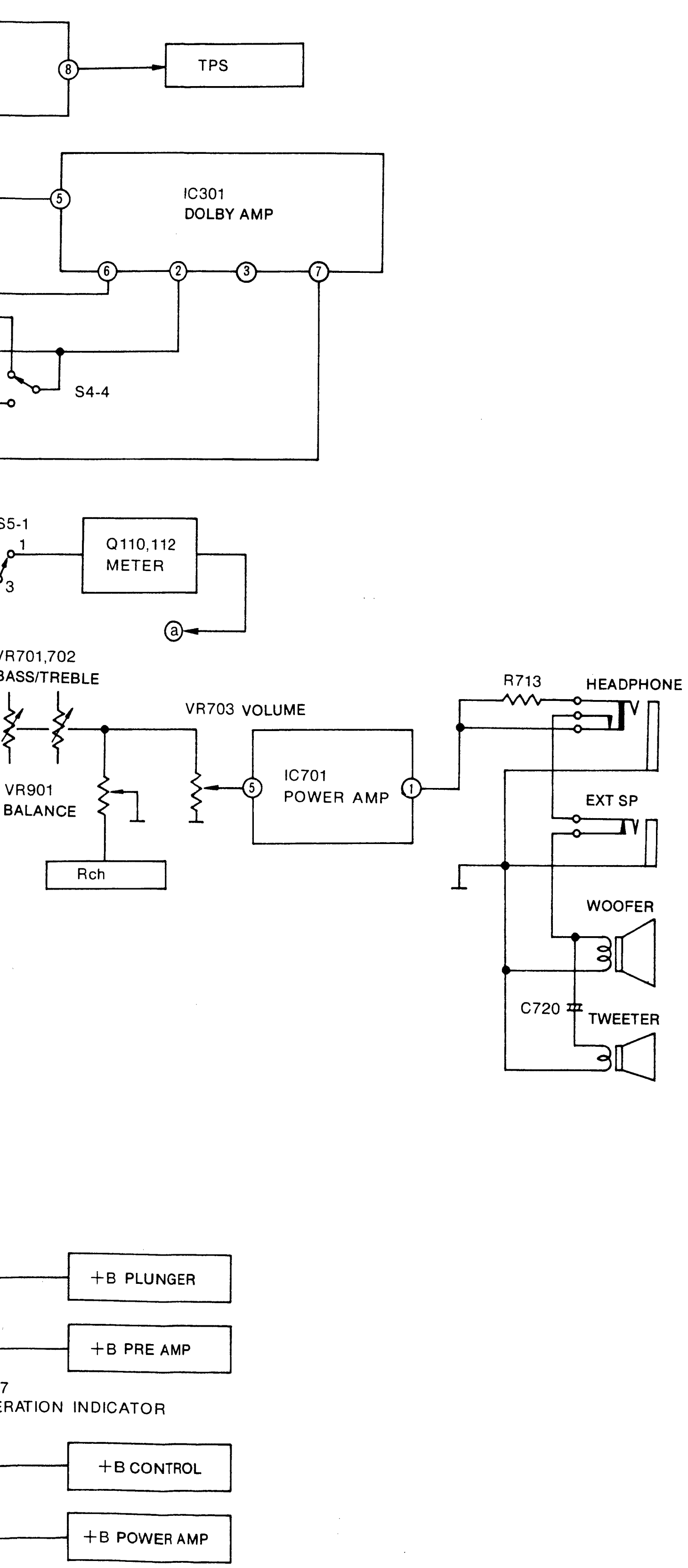

FM ANT
AM ANT
IC1
FM OSC
FM RF AMP
FM MIX

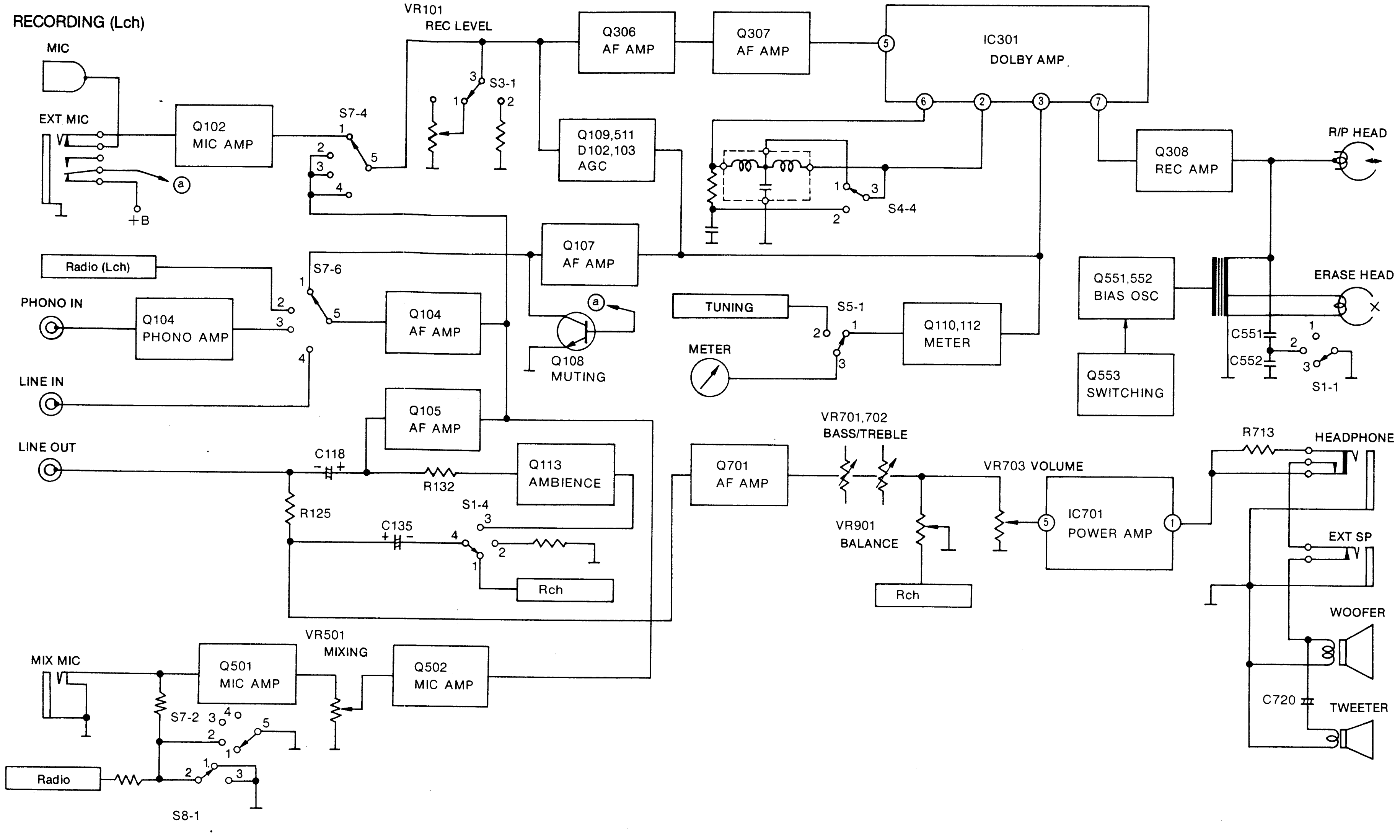
Fig. 23

BLOCK DIAGRAM


TPS
IC301
DOLBY AMP
S4-4
S5-1
Q110,112
METER
VR701,702
BASS/TREBLE
VR703 VOLUME
IC701
POWER AMP
R713
HEADPHONE
EXT SP
WOOFER
C720
TWEETER
VR901
BALANCE
Rch
+B PLUNGER
+B PRE AMP
ERATION INDICATOR
+B CONTROL
+B POWER AMP

AUDIO BLOCK

RECORDING (Lch)


MIC
EXT MIC
+B
Q102
MIC AMP
S7-4
VR101
REC LEVEL
S3-1
Q306
AF AMP
Q307
AF AMP
IC301
DOLBY AMP
Q109,511
D102,103
AGC
S4-4
Q308
REC AMP
R/P HEAD
Radio (Lch)
PHONO IN
Q104
PHONO AMP
S7-6
Q104
AF AMP
Q107
AF AMP
Q108
MUTING
TUNING
S5-1
Q110,112
METER
METER
Q551,552
BIAS OSC
Q553
SWITCHING
ERASE HEAD
C551
C552
S1-1
LINE IN
LINE OUT
Q105
AF AMP
C118
R132
Q113
AMBIENCE
R125
C135
S1-4
Rch
Q701
AF AMP
VR701,702
BASS/TREBLE
VR901
BALANCE
Rch
VR703 VOLUME
IC701
POWER AMP
R713
HEADPHONE
EXT SP
WOOFER
C720
TWEETER
MIX MIC
Q501
MIC AMP
VR501
MIXING
Q502
MIC AMP
S7-2
Radio
S8-1

RADIO BLOCK

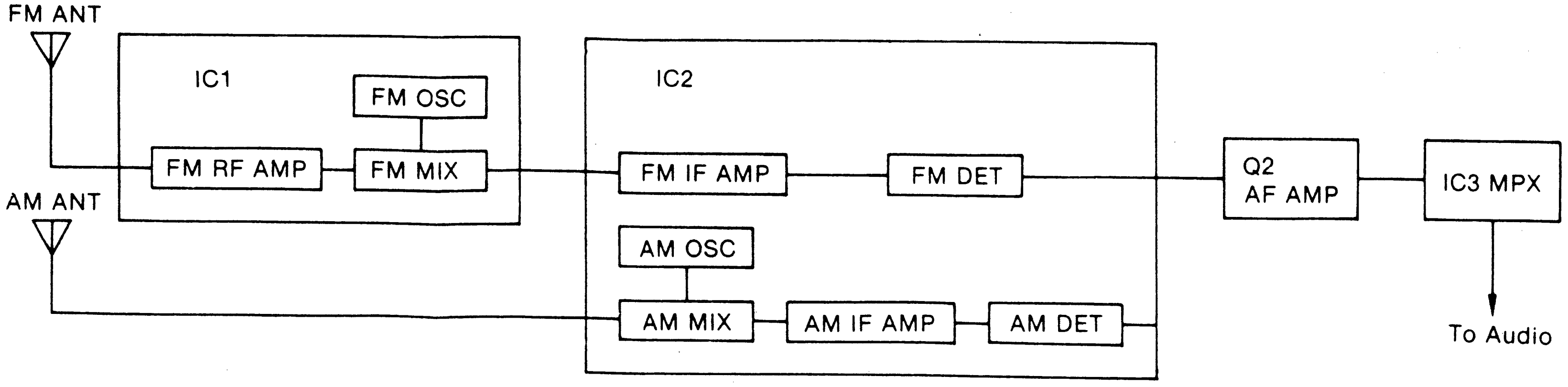

FM ANT
AM ANT
IC1
FM OSC
FM RF AMP
FM MIX
IC2
FM IF AMP
FM DET
AM OSC
AM MIX
AM IF AMP
AM DET
Q2
AF AMP
IC3 MPX
To Audio

Fig. 23

MECHANISM PARTS LOCATION

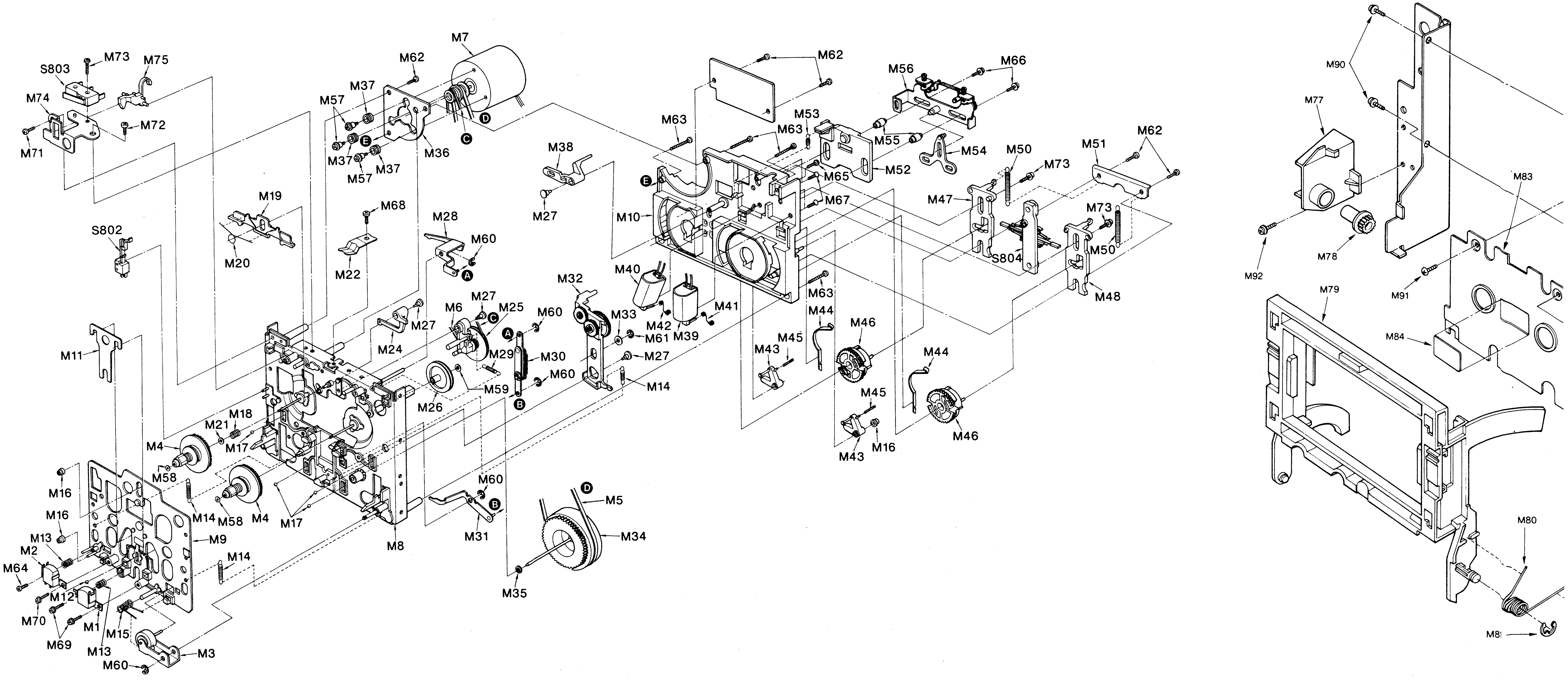

S803
M73
M75
M74
M72
M71
M19
S802
M20
M22
M68
M57
M37
M57
M37
M57
M37
Ⓔ
M62
M7
Ⓓ
Ⓒ
M36
M28
M60
Ⓐ
M27
M24
M27
M6
M25
M60
Ⓐ
Ⓒ
M29
M30
M60
Ⓑ
M59
M26
M11
M21
M18
M4
M17
M58
M16
M16
M13
M2
M64
M12
M70
M69
M1
M13
M15
M60
M3
M14
M58
M4
M17
M9
M14
M8
M60
Ⓑ
M31
Ⓓ
M5
M34
M35
M38
M27
M32
M33
M61
M27
M14
M40
M42
M39
M41
Ⓔ
M10
M63
M62
M63
M53
M65
M67
M63
M44
M45
M43
M46
M44
M45
M43
M16
M46
M56
M66
M55
M52
M54
M50
M73
M47
S804
M51
M62
M73
M50
M48
M90
M77
M92
M78
M83
M91
M79
M84
M80
M81

Fig. 24

MECHANISM PARTS LOCATION

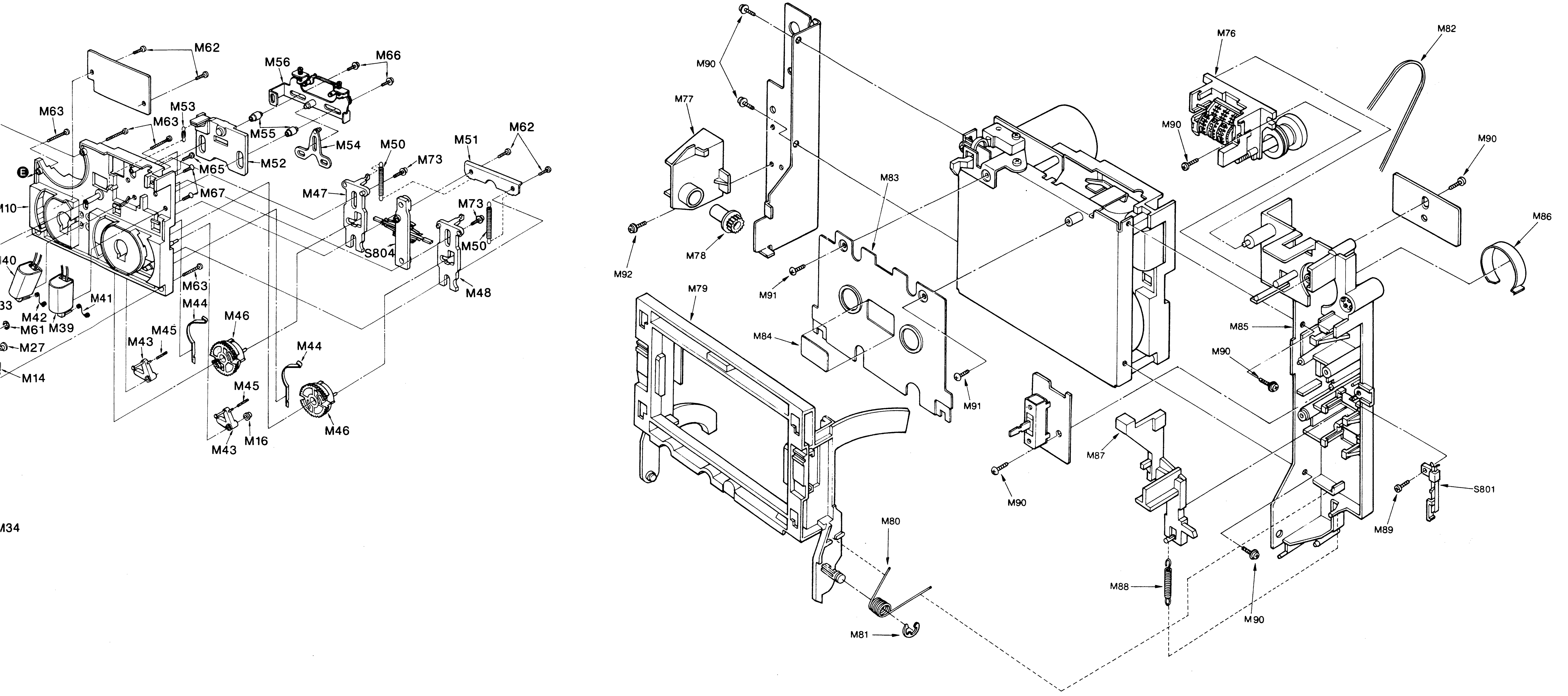

M62
M56
M66
M63
M53
M63
M55
M54
M50
M73
M51
M62
M52
M65
M67
M47
M73
S804
M50
M48
110
40
33
M63
M44
M46
M41
M42
M61
M39
M27
M14
M45
M43
M44
M45
M43
M16
M46
134
M90
M77
M76
M82
M90
M90
M83
M92
M78
M91
M79
M86
M84
M85
M90
M91
M87
M90
S801
M89
M80
M88
M90
M81

Fig. 25

CABINET PARTS LOCATION

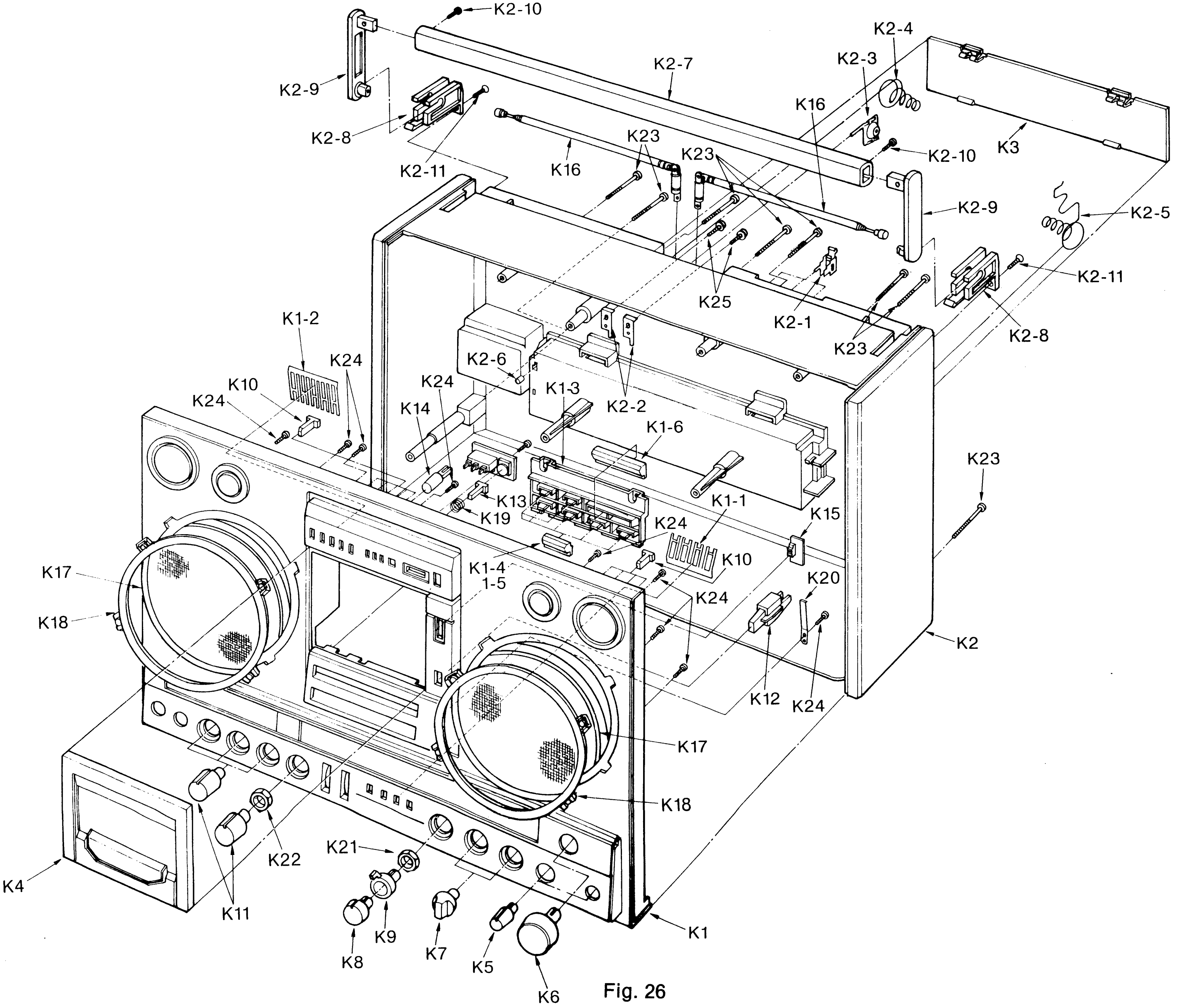

K2-10
K2-9
K2-8
K2-11
K2-7
K16
K23
K23
K2-4
K2-3
K16
K2-10
K3
K2-9
K2-5
K2-11
K25
K2-1
K23
K2-8
K1-2
K24
K10
K24
K24
K2-6
K1-3
K2-2
K14
K1-6
K13
K19
K1-1
K24
K15
K23
K17
K18
K1-4
1-5
K10
K20
K24
K2
K12
K24
K17
K18
K21
K22
K4
K11
K9
K8
K7
K5
K6
K1

Fig. 26

ELECTRICAL PARTS LOCATIONS

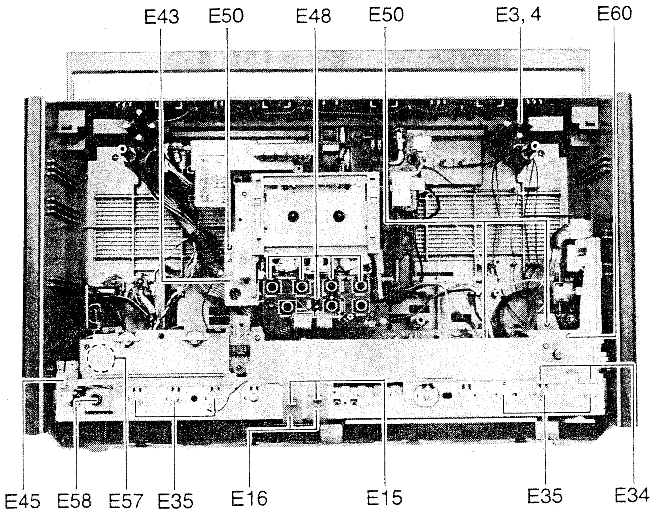

E43
E50
E48
E50
E3, 4
E60
E45
E58
E57
E35
E16
E15
E35
E34

Fig. 27

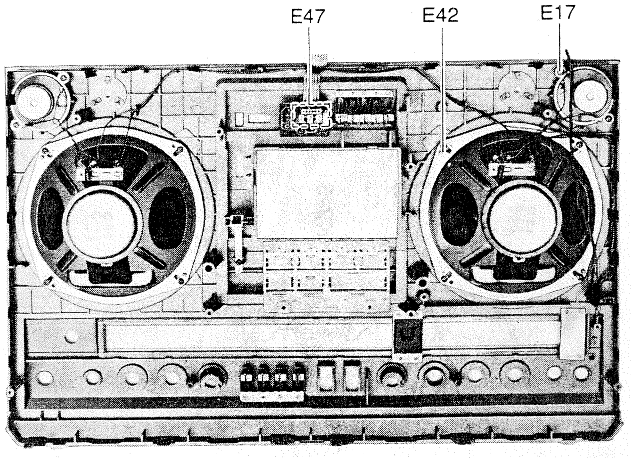


Fig. 28

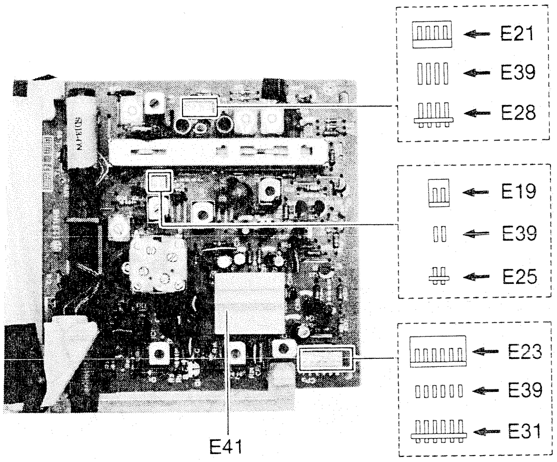

E21
E39
E28
E19
E39
E25
E23
E39
E31
E41

Fig. 29

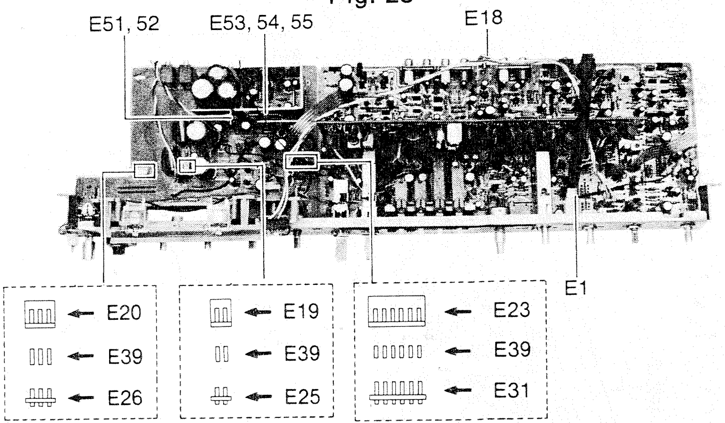

E51, 52
E53, 54, 55
E18
E1
E20
E39
E26
E19
E39
E25
E23
E39
E31

Fig. 30

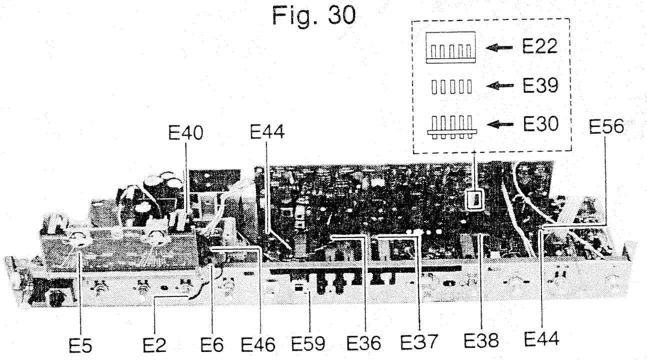

E22
E39
E30
E40
E44
E56
E5
E2
E6
E46
E59
E36
E37
E38
E44

Fig. 31

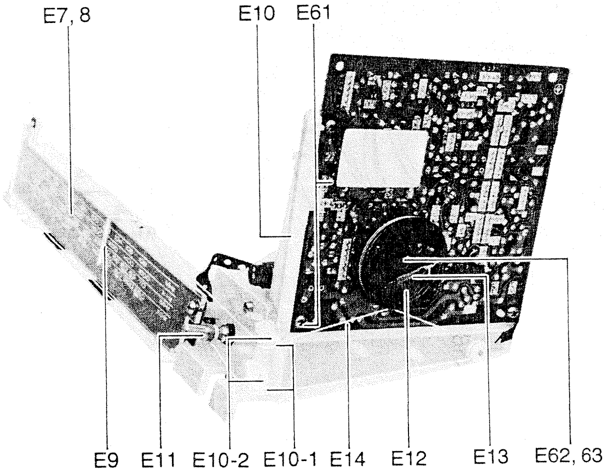

E7, 8
E10
E61
E9
E11
E10-2
E10-1
E14
E12
E13
E62, 63

Fig. 32

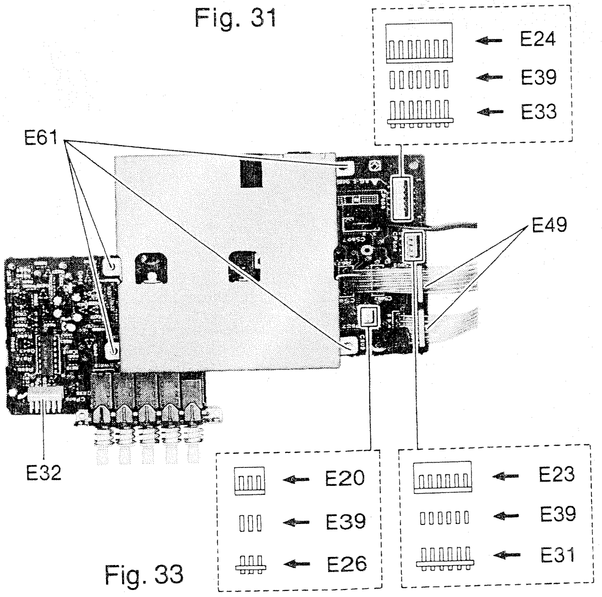

E24
E39
E33
E61
E49
E32
E20
E39
E26
E23
E39
E31

Fig. 33

■ REPLACEMENT PARTS LIST .... Model RX-7000F

(RD81051873C3)

NOTES: 1. Important safety notice.
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
2. The S mark indicates service standard parts and may differ from production parts.

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
		MECHANICAL PARTS		
M1	RJH2E5Z	Record/Playback Head	1	
M2	RJH7E2Z	Erase Head	1	
M3	RFR4Z	Pinch Roller Ass'y	1	
M4	RFJ11Z	Supply Reel Table Ass'y	2	
M5	RFB12Z	Main Belt	1	
M6	RFB13Z	Reel Belt	1	
M7	RFM4Z	Motor	1	
M8	RFU1Z	Chassis	1	
M9	RFU2Z	Head Base	1	
M10	RFU3Z	Sub Chassis	1	
M11	RFD91Z	Spring, Head Base	1	
M12	RFW1Z	Steel Ball	1	
M13	RFS109Z	Spring, Azimuth	2	
M14	RFS110Z	Spring, FF/REW	3	
M15	RFS111Z	Spring, Pinch Roller	1	
M16	RFX22Z	Stopper	3	
M17	RFW2Z	Steel Ball	4	
M18	RFS112Z	Back Tension Spring	1	
M19	RFY51Z	Brake Plate	1	
M20	RFS113Z	Brake Spring	1	
M21	RFN26Z	Washer	2	
M22	RFS114Z	Spring, Cassette Pressure	1	
M24	RFY52Z	Brake Release Lever	1	
M25	RFG6Z	Play Ass'y Clutch	1	
M26	RFQ12Z	Middle Pulley	1	
M27	RFX23Z	Cap	4	
M28	RFY53Z	Play Lever Ass'y	1	
M29	RFS115Z	Spring, Play Clutch	1	
M30	RFY54Z	Lever Ass'y	1	
M31	RFY55Z	Play Lever Ass'y	1	
M32	RFG7Z	FF/REW Gear Ass'y	1	
M33	RFN27Z	Washer	1	
M34	RFF9Y	Flywheel Ass'y	1	
M35	RFN28Z	Washer	1	
M36	RFD92Z	Bracket, Motor	1	
M37	RF19Z	Rubber, Motor	3	
M38	RFY56Z	FF/REW Lever	1	
M39	RFP2Z	Plunger	1	
M40	RFP3Z	Plunger	1	
M41	RFS116Z	Connection Spring	1	
M42	RFS117Z	Connection Spring	1	
M43	RFX24Z	Stopper	2	
M44	RFS118Z	Spring	2	
M45	RFS119Z	Spring, Stopper	2	
M46	RFG8Z	Cam	2	
M47	RFY57Y	FF Lever Ass'y	1	
M48	RFY58Y	REW Lever Ass'y	1	
M50	RFS120Z	Spring, Operation Lever	2	
M51	RFD93Z	Pressure Plate Lever	1	
M52	RFU4Z	Play Lever Ass'y	1	
M53	RFS121Z	Spring, Play Lever	1	
M54	RFY60Z	Cam Ass'y	1	
M55	RFX25Z	Spacer	2	
M56	RFY61Z	FF/REW Lever Ass'y	1	
M57	RFE28Z	Screw	1	
M58	RFN29Z	Washer	1	
M59	RFN30Z	Washer	1	
M60	XUC2FT	Circlip	1	S
M61	XUC15FT	Circlip	1	S
M62	XTN26+6B	Screw	1	S
M63	XTN26+16B	Screw	1	S
M64	XTN2+6B	Screw	1	S
M65	XTN2.6+10B	Screw	1	
M66	XTN26+8B	Screw	1	
M67	XSS26+4	Screw	1	
M68	XTB26+5F	Screw	1	
M69	XSN2+W10	Screw	1	
M70	XSN2+W8	Screw	4	
M71	XTN26+5B	Screw	4	S
M72	XSN3+5S	Screw	3	
M73	XSN23+10	Screw	2	
M74	RFD94Z	Bracket, Switch	1	
M75	RFY62Z	Safety Lever	5	
M76	RSE9002Z	Counter	1	
M77	RME254Z	Bracket	5	
M78	RDG5697Z	Pumper Gear	4	
M79	RYQX7000N	Cassette Holder Ass'y	1	
M80	RDS5073Y	Eject Kick Spring	1	
M81	XUC5FT	Circlip	2	S
M82	RDV10Z	Counter Belt	4	
M83	RDH173Z	Mechanism Cover	1	
M84	RGX1130Z	Reflection Plate	2	
M85	RUA460Z	Counter Chassis	1	
M86	RUE44Z	Back York	1	
M87	RUB247Z	Eject Lever	1	
M88	RDS4171A	Spring, Eject Lever	3	
M89	XTNR2+6CFZ	Screw	1	
M90	XSN3+6S	Screw	1	S
M90	XWG3	Washer	1	S
M91	XTV26+6JFZ	Screw	2	
M92	XSN3+8S	Screw	1	S
M92	XWG3	Washer	1	
M93	RFN46Z	Washer	1	
		INTEGRATED CIRCUITS, TRANSISTORS AND DIODES		
IC1	AN7213	IC	1	
IC2	AN7220B	IC	1	
IC301,401	NE646B	IC	2	
IC501	RVIBA336	IC	1	
IC502	RVIBA1330	IC	1	
IC551	RVIBA328	IC	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
IC601	RVIUPD652C19	IC	1	
IC602	DN6839A	IC	1	
IC603	RVIM53273P	IC	1	
IC701,802	BA532S	IC	2	
Q1	2SC1359B	Transistor (Si)	1	S
Q2,3,5	2SC1685-Q	Transistor (Si)	3	S
Q4,6,555	2SA722-S	Transistor (Ge)	3	S
Q7	2SC2001K2	Transistor (Si)	1	
Q101,106,107,110,111, 114,201,206,207,210, 211,214,301,304∿306, 401,404∿406,503,505 506,508∿512,514∿516, 518∿521,556,557,701, 801,903,1201,1202	2SC1684S	Transistor (Si)	42	
Q102,202,302,303,307, 402,403,407,501	2SC1845	Transistor (Si)	9	
Q103,203	2SC1328-T	Transistor (Si)	2	S
Q104,105,112,113,204, 205,212,213,308,310, 408,410,502,507	2SC1685-Q	Transistor (Si)	14	S
Q108,115,208,215,309, 409,551∿553	2SC1788RDR2	Transistor (Si)	9	
Q109,209	2SC828AGC3	Transistor (Si)	2	S
Q504,513,517,555	2SA722-S	Transistor (Ge)	4	S
Q554	2SA1015	Transistor (Ge)	1	
Q601∿606,613,614,618, 620,629,630,642,644	2SB709S	Transistor (Ge)	14	
Q607∿611,617,619,621∿ 623,625,627,631∿637, 643,646,647	2SD601S	Transistor (Si)	22	
Q641	2SC1317NCR	Transistor (Si)	1	
Q624,626,628,901,902	2SC1568-S	Transistor (Si)	5	S
Q645	2SD596DV3	Transistor (Si)	1	
D1,4∿8,102,103,202, 203,301,401,510∿512, 515∿517,519∿523,553, 624,903,1201∿1204	MA161	Diode (Si)	30	S
D2	RVDSD113	Diode (Si)	1	S
D3,106,107,206,207	2OA90	Diode (Ge)	5	S
D501∿504,904	RVDSM1502LF	Diode (Si)	5	
D505	RVDDSA26BLF	Diode (Si)	1	
D507	LN324GP	LED (Ga)	1	
D508,626∿628	LN224RP	LED (Ga)	4	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
D518	RVDRD6R2EB	Diode (Si)	1	S
D551,552	RVDKB262D	Diode (Si)	2	S
D601	RVDSLR34YC	Diode (Si)	1	
D602,604,605	RVDSLR34GC	Diode (Si)	3	
D603	RVDSLR34URC	Diode (Si)	1	
D606,607,611∿614,617, 618,625,629∿635	MA151K	Diode (Si)	16	
D608	MA151WA	Diode (Si)	1	
D615	MA151WK	Diode (Si)	1	
D619	RVDRD5R6EB2W	Diode (Si)	1	
D620	RVDRD6R8EB2W	Diode (Si)	1	
D636	RVDRD5R1EB2W	Diode (Si)	1	
D901,912	MA1100	Diode (Si)	2	S
D907	LN222RP	LED (Ga)	1	
		THERMISTOR		
TH551	RRT202	Thermistor	1	
		COILS AND TRANSFORMERS		
L3,4	RLF5D13	Coil, MW,SW1, Antenna	2	
L5	RLA3M62	Coil, SW2 Antenna	1	
L7	RLD4Y44	Coil, FM Tuning	1	
L8	RLD4Y43	Coil, FM Oscillator	1	
L9	RLO2M14	Coil, MW Oscillator	1	
L10	RLO3M44	Coil, SW1 Oscillator	1	
L11	RLO3M45	Coil, SW2 Oscillator	1	
L301,401	QLQM1531	Coil, Bias Trap	2	
L551	RLO9C27	Coil, Bias Oscillator	1	
L601	RLO9M12	Coil, Bias Oscillator	1	
T1	RLA4Z6	Balun Coil	1	
T2,4	RLI4M101	IFT, FM	2	S
T3	QLI2M102M	IFT, AM	1	S
T101,201	QLM1M2	Trap Coil	2	
T301,401	SLM1Z19	Filter, Dolby	2	
T901	RLT5L5G1A	Power Transformer	1	⚠
		VARIABLE RESISTORS		
VR101,201	EWJSFAF14B14	Variable Resistor, 10kΩ (B)	2	
VR102,202	EVNJ0AA00B54	Variable Resistor, Pre-set, 50kΩ (B)	2	S
VR301,303,401,403	EVNM4AA00B15	Variable Resistor, Pre-set, 100kΩ (B)	4	S
VR302,402	EVNM4AA00B54	Variable Resistor, Pre-set, 50kΩ (B)	2	S
VR501	EWH48A539A54	Variable Resistor, 50kΩ (A)	1	
VR502,551,552	EVNM4AA00B14	Variable Resistor, Pre-set, 10kΩ (B)	3	S
VR701,702,801,802	EWKEUA053A54	Variable Resistor, 50kΩ (A)	4	
VR703,803	EWJGAA053A54	Variable Resistor, 50kΩ (A)	2	
VR901	EVH2AA539G54	Variable Resistor, 50kΩ (G)	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
		VARIABLE CAPACITORS		
VC2,4,5,6	RCV4RC7V1K	Tuning Capacitor, w/Trimmer (CT2,4,5,6)	1	
CT3,8	RCV1PX10AGS	Trimmer Capacitor	2	
CT1,7	RCV1PX20AGS	Trimmer Capacitor	2	
		CERAMIC FILTERS		
CF1,2	RVFCF10M12FR	Ceramic Filter	2	
CF3	RVFSFZ455B	Ceramic Filter	1	
		COMPONENT COMBINATION		
Z1	RXABPWB3	Component Combination	1	
		SPEAKERS		
	EAS16P197SA	Speaker, 16cm (6-1/2"), 3Ω, Woofer	2	
	RAS5PH05Z	Speaker, 5cm (2"), 4Ω, Tweeter	2	
		SWITCHES		
S1	RST3D13Z	Switch, Mode, Beat Proof	1	
S2	RST4D01Z	Switch, Tape	1	
S3~6	RSHX040Z	Switch, Light, Meter, Dolby, Rec Mode	1	
S7	RSR4F03Z	Switch, Function	1	
S8	ESA26535	Switch, Band	1	
S601~607, 614	RSH1A12Z	Switch, REW, FF, PAUSE, REC MUTE REC, PLAY, STOP, PROGRAM	8	
S608	RSS3B16Z	Switch, Timer Stand By	1	
S610~613	RSHX041Z	Switch, Auto Operation	1	
S801	RSH1A22Y	Switch, Eject	1	
S802	RFA15Z	Switch, Sleep	1	
S803	RFA14Z	Switch, Rec Protect	1	
S804	RFA16Z	Switch, FF/Rew	1	
S901	RSH1A24Z	Switch, Power	1	
S903	RSR4A01W	Switch, Voltage Selector	1	⚠
		JACKS		
J1~4,7,8	RJF1081Z	Jack, Line, Phono	3	
J5,6	RJJ1D2Z	Jack, EXT Mic	2	
J9,10	RJJ87Y	Jack, EXT SP	2	
J11	RJJ10C	Jack, Mixing Mic	1	
J12	RJJ1E2Z	Jack, Headphone	1	
J13,14	QJS0328	Jack, AC/DC IN	1	⚠
J15	QJS1955H	Jack, Remote Control	1	
		RESISTORS (Value is in OHMS)		
R551	ERD25FJ1R0	1 1/4W Carbon	1	S
R552,573	ERD25FJ2R2	2.2 " "	2	S
R304,404	ERD25FJ100	10 " "	2	S
R5,6,15,109, 131,209,231	ERD25FJ470	47 " "	7	S
R2,3,10,13,14,39,156, 256,513,529,533,545, 546,568,570,584,591, 1103	ERD25FJ101	100 " "	18	S
R134,234	ERD25FJ121	120 1/4W Carbon	2	S
R307,407,508,590,905	ERD25FJ151	150 " "	5	S
R136,236,704,804	ERD25FJ181	180 " "	4	S
R24,117,217,512,711, 713,811,813	ERD25FJ221	220 " "	8	S
R30	ERD25FJ561	560 " "	1	S
R16	ERD25FJ331	330 " "	1	S
R9	ERD25FJ391	390 " "	1	S
R162,262,532,538, 539,901,907	ERD25FJ471	470 " "	7	S
R519	ERD25FJ330	33 " "	1	S
R28,319,419	ERD25FJ681	680 " "	3	S
R23,323,423	ERD25FJ821	820 " "	3	S
R582	ERD25FJ271	270 " "	1	S
R12,25,125,130,146, 153,225,230,246,253, 329,330,337,429,430, 437,527,535,589,706, 707,806,807,903	ERD25FJ102	1 k " "	24	S
R118,128,218,228	ERD25FJ122	1.2 k " "	4	S
R33,558,566,585,904	ERD25FJ152	1.5 k " "	5	S
R514	ERD25FJ182	1.8 k " "	1	S
R18,21,34,35,103,129, 135,203,229,235,334, 434,510,547,553,1203, 1204	ERD25FJ222	2.2 k " "	17	S
R120,220,557	ERD25FJ272	2.7 k " "	3	S
R27,107,113,132,207, 213,232,305,327,405, 427,701,801,1205	ERD25FJ332	3.3 k " "	14	S
R317,417,155,255, 563,565,569,583, 597,702,802,902	ERD25FJ392	3.9 k " "	12	S
R36,102,124,142,144, 147,202,224,242,244, 247,310,321,335,410, 421,435,509,517,555, 556,559,560,562,567, 580,587,592,593,595	ERD25FJ472	4.7 k " "	30	S
R302,303,402,403,504	ERD25FJ562	5.6 k " "	5	S
R106,206,312, 412,549,581	ERD25FJ682	6.8 k " "	6	S

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
R137,237,536,705,805	ERD25FJ822	8.2 k 1/4W Carbon	5	S
R31,114,119,214,219,505,506,520,523,537,541,572,586,588,596,1110,1111,1113,1115	ERD25FJ103	10 k " "	19	S
R115,215	ERD25FJ183	18 k " "	2	S
R20,22,140,151,159,240,251,259,315,415,571,1105,1108	ERD25FJ223	22 k " "	13	S
R126,150,226,250,526	ERD25FJ273	27 k " "	5	S
R101,161,201,261,301,309,401,409,515,534,543,594,709,710,809,810,1104	ERD25FJ153	15 k " "	17	S
R17,38,105,152,205,252,308,326,333,408,426,433,516,524,525,528,542,544,1112,1114	ERD25FJ473	47 k " "	20	S
R139,141,239,241	ERD25FJ333	33 k " "	4	S
R19,540	ERD25TJ683	68 k " "	2	S
R1,37,104,149,154,204,249,254,306,406,530,531,564,598,599,1101,1102,1106,1107,1109,1116,1201	ERD25TJ104	100 k " "	22	S
R7,26,121,123,221,223,311,336,411,436,521	ERD25TJ224	220 k " "	11	S
R148,248,331,431	ERD25TJ274	270 k " "	4	S
R138,238,325,425,712,812	ERD25TJ154	150 k " "	6	S
R158,258,332,432	ERD25TJ184	180 k " "	4	S
R108,208,324,424	ERD25TJ394	390 k " "	4	S
R314,316,414,416	ERD25TJ334	330 k " "	4	S
R522	ERD25TJ564	560 k " "	1	S
R318,418	ERD25TJ684	680 k " "	2	S
R518,703,803	ERD25TJ824	820 k " "	3	S
R11,29,32,511,1118,1202	ERD25TJ474	470 k " "	6	S
R122,133,143,145,222,233,243,245,322,328,422,428	ERD25TJ105	1 M " "	12	S

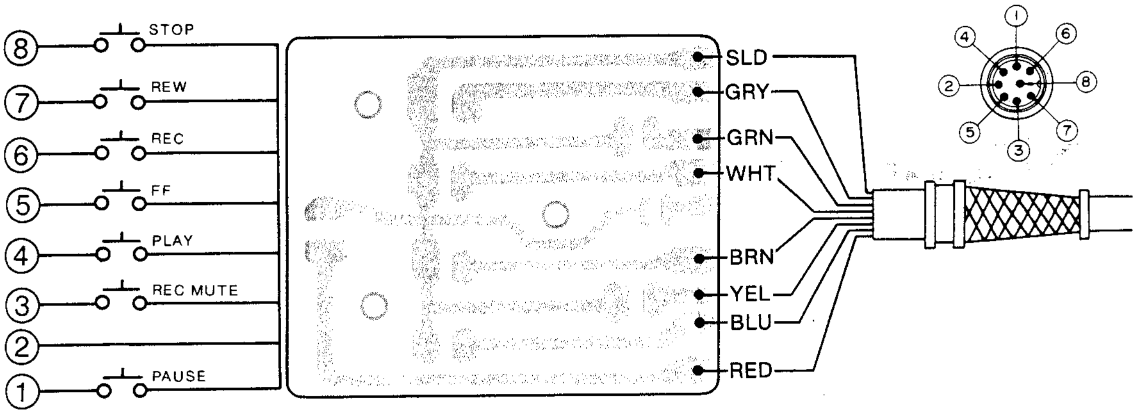
Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
R116,216,507	ERD25TJ155	1.5 M 1/4W Carbon	3	S
R548	ERC14GK106	10 M " Solid	1	S
R561	ERD2FCJ4R7	4.7 2W Carbon	1	
R1008,1011	RRD18XK560	56 1/8W Chip	2	
R696	RRD18XK680	68 " "	1	
R685	RRD18XK820	82 " "	1	
R675,1009	RRD18XK101	100 " "	2	
R613,615,619,621,679,681,683	RRD18XK471	470 " "	7	
R663~665	RRD18XK681	680 " "	3	
R617,649,699,1012	RRD18XK102	1 k " "	4	
R695	RRD18XK222	2.2 k " "	1	
R650	RRD18XK332	3.3 k " "	1	
R693	RRD18XK392	3.9 k " "	1	
R637,682,1014	RRD18XK472	4.7 k " "	3	
R1002,1005,1013	RRD18XK682	6.8 k " "	3	
R648	RRD18XK152	1.5 k " "	1	
R601,603,605,607,609,611,614,616,618,620,622,647,651,653,656,659,666~669,678,680,684,690~692,694,698,1003	RRD18XK103	10 k " "	29	
R661	RRD18XK153	15 k " "	1	
R623,640,646,676,688,689	RRD18XK223	22 k " "	6	
R624~631,677	RRD18XK473	47 k " "	9	
R638	RRD18XK823	82 k " "	1	
R602,604,606,608,612,639,641~645,652,655,658,671,672,673,686,1010	RRD18XK104	100 k " "	19	
R1015	RRD18XK224	220 k " "	1	
R610,636,670,697	RRD18XK334	330 k " "	4	
R662	RRD18XK474	470 k " "	1	
R687	RRD18XK105	1 M " "	1	
		CAPACITORS (Value is in MICRO FARADS except P.P=PICO FARADS)		
C1,2,55	ECCD1H030C	3 P 50V Ceramic	3	
C22,57	ECCD1H040C	4 P " "	2	
C14	ECCD1H050CC	5 P " "	1	
C3,6	ECCD1H070DC	7 P " "	2	
C47	ECCD1H100KC	10 P " "	1	
C4,17	ECCD1H120KC	12 P " "	2	
C15,16,56	ECCD1H150KC	15 P " "	3	
C20	ECCD1H180KC	18 P " "	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
C13	ECCD1H220KC	22 P 50V Ceramic	1	
C39,40	ECCD1H560KC	56 P " "	2	
C38,585	ECCD1H101K	100 P " "	2	
C301,401,567	ECCD1H181K	180 P " "	3	
C32,46,303,403,716,816,1205	ECCD1H331K	330 P " "	7	
C58,59	ECCD1H102MD	0.001 " "	2	
C712,812	ECCD1H820K	82 P " "	2	
C8,9,11	ECKD1H102KB	0.001 " "	3	
C7,28,309,409,511,555	ECKD1H103MD	0.01 " "	6	
C104,107,125,204,207,225,314,318,335,414,418,435,506,510	ECKD1H102ZF	0.001 " "	14	
C711,811	ECKD1H681KB	680 P " "	2	
C702,717,802,817	ECKD1H472MD	0.0047 " "	4	
C706,806	ECKD1H682MD	0.0068 " "	2	
C308,333,408,433,708,715,808,815,1213	ECKD1H102MD	0.001 " "	9	
C514∿517,540,904,905,908,914	ECKD1H103ZF	0.01 " "	9	
C18,27,29,36,49,101,117,123,201,217,223,502,524,549,582,704,804	ECFVD223MD	0.022 25V Semi-conductor	17	
C133,134,233,234	ECFVD103MD	0.01 " "	4	
C111,211	ECFVD153KA	0.015 " "	2	
C120,220	ECFVD562KA	0.0056 " "	2	
C131,231	ECFVD153MD	0.015 " "	2	
C323,423	ECFVD472KA	0.0047 " "	2	
C324,424	ECFVD273KA	0.027 " "	2	
C12,35,102,202,304,404	ECFVD333MD	0.033 " "	6	
C33,34,328,428	ECFVD473MD	0.047 " "	4	
C109,113,209,213,331,431,580,709,809	ECFVD683MD	0.068 " "	9	
C19,112,122,212,222,586	ECFVD104MD	0.1 " "	6	
C519	ECQS2B681JZ	680 P 200V Styrol	1	
C23,307,407	ECQS2B361JZ	360 P " "	3	
C320,420,551	ECQS2B392JZ	3900 P " "	3	
C557,558	ECQG05472MZ	0.0047 50V Polyester	2	
C556	ECQG05123KZ	0.012 " "	1	
C552	ECQG05683KZ	0.068 " "	1	
C718,818	ECQG05224MZ	0.22 50V Polyester	2	
C24	ECQS2B152JZ	1500 P 200V Styrol	1	
C25	ECQS2B472KZ	0.0047 " "	1	
C30,305,405,564,710,810,901	ECEA1AS101	100 10V Electrolytic	7	S
C37,110,119,127,128,210,219,227,228,326,426,501,505	ECEA1HS0R1	0.1 50V "	13	
C108,132,208,232,520,607,705,707,805,807	ECEA1HSR22	0.22 " "	10	
C114,124,214,224,315,325,415,425,503,581	ECEA1HSR33	0.33 " "	10	
C521	ECEA1HSR47	0.47 " "	1	S
C305,405,605,606,608,633,647,648,651,714,814,907	ECEA1AS470	47 10V "	12	S
C50,310∿312,410∿412,630,652,1202	ECEA25Z4R7	4.7 25V "	10	S
C31,41,43,103,105,106,116,118,121,135,136,203,205,206,216,218,221,235,236,306,316,319,329,330,332,406,416,419,429,430,432,513,536,542,627,628,701,703,713,801,803,813,913	ECEA50Z1	1 50V "	43	S
C918	ECEA1ES470	47 25V "	1	S
C909	ECEA1ES101	100 " "	1	S
C583	ECEA1CS330	33 16V "	1	S
C508,533,541,544,547	ECEA50Z2R2	2.2 50V "	5	S
C522,530,562	ECEA50Z3R3	3.3 " "	3	S
C115,215,529,531,545,584	ECEA50Z4R7	4.7 " "	6	S
C126,130,226,230,302,317,322,327,402,417,422,427,507,512,523,543,546,603,635,646,1201	ECEA1HS100	10 " "	21	S
C42,129,229,321,421,504,509,518,527,532,537,538,548,553,554,559,563,565,609,903,906	ECEA1AS221	220 10V "	22	S
C916	ECEA1ES221	220 25V "	1	S

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
C526,534,535, 560,912,915	ECEA1AS471	470 10V Electrolytic	6	S
C917	ECEA1VS102	1000 35V "	1	S
C528	ECEA1AS102	1000 10V "	1	S
C719,819	ECEA1CS222	2200 16V "	2	S
C902,920	ECEA1ES332	3300 25V "	2	S
C649	ECEA0JS222	2200 6.3V "	1	S
C566	ECSF1CS106	1000 16V "	1	
C720,820	ECEA25Y6R8	6.8 25V "	2	
C44,45	ECSF1AM105	1 10V "	2	
C626,640∿644	ECUX1H102MD	0.001 50V Chip	6	
C601,602,618,619, 621,631,632	ECUX1H103ZF	0.01 " "	7	
C645	ECUX1H223MD	0.022 " "	1	
C659	ECUX1H153MD	0.015 " "	1	
C620	ECUX1H101KD	100 P " "	1	
C1208∿1212	ECUX1H331KD	330 P " "	5	
		CABINET PARTS		
K1	RYMX7000FX8	Front Cabinet Ass'y	1	
K1-1	RUS433Z	Spring, Switch	1	
K1-2	RUS434Z	Spring, Switch	1	
K1-3	RKE371Z	Holder, Button	1	
K1-4	RBC323Z	Button, Rec Mute	1	
K1-5	RBC324Z	Button, REW, PLAY, etc.	5	
K1-6	RBC325Z	Button, Stop	1	
K2	RYFX7000FX7	Rear Cabinet Ass'y	1	
K2-1	RJF1065Z	Terminal, EXT Ant	3	
K2-2	RJT698Z	Terminal, Telescopic Ant	2	
K2-3	RJC111Z	Terminal, Battery + Side	1	
K2-4	RJC512Z	Spring, Battery - Side	1	
K2-5	RJC936Z	Terminal, Battery +, - Side	1	
K2-6	RJT398Y	Connecting Pipe	1	
K2-7	RKH103Z7	Handle	1	
K2-8	RKT126Z	Stopper	2	
K2-9	RKX180Z	Arm, Handle	2	
K2-10	XTB3+8BFN	Screw, Handle M'tg	2	S
K2-11	XTS3+12BFN	Screw, Arm M'tg	2	S
K3	RYNX7200N7	Battery Cover Ass'y	1	
K4	RYPX7000N	Cassette Panel Ass'y	1	
K5	RBN554Z	Knob, Mixing Level etc.	2	
K6	RBN561Z	Knob, Tuning	1	
K7	RBN562Z	Knob, Band, Function	2	
K8	RBN556Z	Knob, Rec Level	1	
K9	RBS174Z	Knob, Rec Level	1	
K10	RBC319Z	Knob, Auto Play, Dolby etc.	9	
K11	RBN557Z	Knob, Volume, Tone etc.	4	
K12	RBC313Z	Button, Eject	1	
K13	RBC318Y	Button, TPS	1	
K14	RBC322Z	Button, Power	1	
K15	RBD133Z	Button, Timer Stand By	1	
K16	XEARR180FAY	Telescopic Ant	2	
K17	RGM205Z	Metal Grille, Woofer	2	
K18	RGX1173Z	Ornament, Woofer	2	
K19	RDS5105Z	Spring, TPS Button	1	
K20	RUS432Z	Spring, Eject Button	1	
K21	XNS9	Nut, Rec Level M'tg	1	
K22	XNS8	Nut, Treble M'tg	1	
K23	XTN35+50G	Screw, Cabinet M'tg	8	
K24	XTV3+12G	Screw	10	
K25	XYN3+F16FN	Screw, Telescopic Ant M'tg	2	
		ELECTRICAL PARTS		
E1	ESA33245B	Wire, Band Switch	1	
E2	RJT301-1	Terminal, Earth	1	
E3	RJM142Z	Built-in Microphone	2	
E4	RHG574Z	Rubber, Microphone	2	
E5	RSM9507Y	Meter	1	
E6	XAMR43T150A	Pilot Lamp	1	
E7	RKD571X	Scale, Dial	1	
E8	RDH177Z	Back Plate, Dial	1	
E9	RDP824Z	Pointer, Dial	1	
E10	RZAX7000N	Dial Chassis Ass'y	1	
E10-1	RDR20-3	Pulley, Dial	2	
E10-2	RDY43Z	Shaft, Pulley	2	
E11	RDT9122Y	Shaft, Tuning	1	
E12	RDD4015Y	Drum, Dial	1	
E13	RDS4090A	Spring, Dial	1	
E14	RDZ05Z	Cord, Dial	1	
E15	RBS175Z	Knob, Switch	2	
E16	RUV617Z	Cover, Switch	2	
E17	XTW3+12F	Screw, Tweeter M'tg	4	
E18	RJF1046Z	Terminal, Phono Earth	1	
E19	RJS171Z	Socket, 2 Pin	2	
E20	RJS253Y	Socket, 3 Pin	6	
E21	RJS216Y	Socket, 4 Pin	5	
E22	RJS217Y	Socket, 5 Pin	2	
E23	RJS112Y	Socket, 6 Pin	5	
E24	RJS219Y	Socket, 7 Pin	1	
E25	RJP213Z	Plug, 2 Pin	1	
E26	RJP137Z	Plug, 3 Pin	5	
E27	RJP133Z	Plug, 3 Pin	1	
E28	RJP107Z	Plug, 4 Pin	3	
E29	RJP134Z	Plug, 4 Pin	1	
E30	RJP116Z	Plug, 5 Pin	2	
E31	RJP142Z	Plug, 6 Pin	3	
E32	RJP144Z	Plug, 6 Pin	1	
E33	RJP119Z	Plug, 7 Pin	1	
E34	XTW3+8L	Screw, Dial Chassis M'tg	1	
E35	XNS8D	Nut	7	
E36	RJT666Z	Connector, 5 Pin	2	
E37	RJT729Z	Connector, 12 Pin	1	
E38	RJT748Z	Connector, 18 Pin	1	
E39	RJT462Z	Terminal	88	
E40	RMM49Z	Bracket, Meter	1	
E41	RMC706Z	Shield Cover, IC	1	
E42	XTV3+12G	Screw, Woofer M'tg	17	
E43	RJT202B	Terminal, Earth	2	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
E44	RMD1111Z	Bracket, PC Board	1	
E45	RMP128Z	Holder, LED	1	
E46	RMP153Z	Holder, LED	1	
E47	RMP154Z	Holder, LED	1	
E48	RMP158Z	Holder, LED	5	
E49	RUL532Z	Bracket, Lead Wire	5	
E50	XTV3+12GR	Red Screw, PC Board M'tg	13	
E51	XSN3+6S	Screw, Heat Sink M'tg	8	S
E52	XWA3B	Washer	10	S
E53	XWG3F13	Washer	2	S
E54	XTN3+8B	Screw, Heat Sink M'tg	2	S
E55	XWG3	Washer	2	S
E56	XSN3+8S	Screw, PC Board M'tg	2	S
E57	XYC4+BF6	Screw, Transformer M'tg	2	
E58	XNS12D	Nut, Headphone Jack	2	
E59	XTW3+6L	Screw, PC Board M'tg	1	
E60	XTV3+10G	Screw, PC Board M'tg	2	
E61	XTV3+10G	Screw, Dial Chassis M'tg	3	
E62	XSN26+8	Screw, Dial Drum M'tg	1	S
E63	XWA26B	Washer	1	S
		ACCESSORIES		
	RJA21Z	Power Cord, AC	1	⚠
	RJL6Y	Remote Control	1	
	RJN24Z	Cassette Tape	1	
	RJP120ZS	Plug, AC	1	⚠
		PACKING MATERIALS		
	RPP402Z	Polyethylene Cover	1	
	RPN3337Z	Pad	1	
	RPN3333Z	Pad, Front	1	
	RPN3465Z	Pad, Upper	1	
	RPN9364Z	Pad, Complete	1	
	RPK1156Z	Gift Box	1	
		PRINTED MATERIAL		
	RQX6754Z	Instruction Book	1	
		REMOTE CONTROL BOX		
1	RYMD7000FX	Cabinet Ass'y	1	
2	RYFD7000FX	Cabinet Cover Ass'y	1	
3	RWED9840N	Cord	1	
4	QG01724	Button, PAUSE, REC etc.	5	
5	QG01725	Button, REC	1	
6	QG01726	Button, STOP	1	
7	QML3662	Guide Lever	1	
8	QSW1116	Switch	7	
9	QTD1288	Clamper	1	
10	QBG1685	Bushing	1	
11	XTS26+10	Screw, Cover M'tg	3	S
12	XTN3+6B	Screw, Circuit Board M'tg	1	S

SCHEMATIC DIAGRAM AND CIRCUIT BOARD OF REMOTE CONTROL BOX



⑧
STOP
⑦
REW
⑥
REC
⑤
FF
④
PLAY
③
REC MUTE
②
①
PAUSE
SLD
GRY
GRN
WHT
BRN
YEL
BLU
RED
①
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⑤
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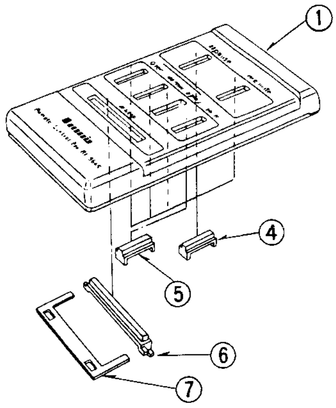
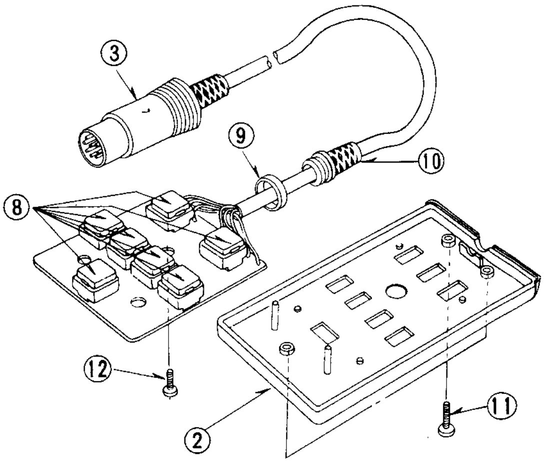
③

PARTS LOCATION OF REMOTE CONTROL BOX





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